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# **BALLISTOCARDIOGRAPHY**

A Bibliography

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NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

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# **BALLISTOCARDIOGRAPHY**

# A Bibliography

A compilation of references to papers, reports, monographs, reviews and books, of both domestic and foreign origin, which appeared during the period 1877-1964. The references were compiled by the members of the staff of Federal Aviation Agency and the bibliography is published under the joint auspices of FAA and NASA.





# INTRODUCTION

The publication of this bibliography on *Ballistocardiography*, NASA SP-7021 (FAA AM 65-15) fulfills a long-standing requirement for a comprehensive and retrospective collection of references on a subject that is of particular interest to medical investigators and cardiovascular physiologists engaged in aerospace studies.

Ballistocardiography is a technique for producing a graphical representation of repetitive motions of the human body arising from the sudden ejection of blood into the great vessels with each heart beat. Standard ballistocardiographic techniques are emphasized in the references included in the bibliography, but attention is also given to several related methods that are used to record these phenomena and to the equipment and instrumentation employed in such investigations.

The format of the citations in NASA SP-7021 (FAA AM 65-15) was chosen to resemble, as closely as possible, the format that is now being used in the *Index Medicus* published by the National Library of Medicine, except that English titles of foreign language articles appear in parentheses instead of in brackets as they do in *Index Medicus*. In each case, an attempt was made to identify the language of the article, or the place of publication of the foreign language journal. Since the citations were gathered over a period of years and occasionally from sources which do not appear in standard indexes, complete information was not always available.

Citations are arranged alphabetically by personal author.

In a large measure, the comprehensiveness of this collection of references is due to information obtained from card files compiled and maintained by Dr. William R. Scarborough of the Georgetown Clinical Research Institute, Office of Aviation Medicine, FAA, supplemented by the private collections of Drs. Isaac Starr, Abraham Noordergraaf, and John L. Nickerson. Selection and preparation of individual references and general editing of the material was done by Dr. Scarborough, who received valuable assistance from Mrs. Claire Tedesco of the Medical Library Branch of the FAA Library. Final compilation and printing were completed under the supervision of NASA.

- ABBONI, F.; and LAPICCIRELLA, V.: (Ballistocardiographical Studies of Athletes (Football Players and Oarsmen) at Rest and After Exercise.) Cardiologia (Basel), 30: 228, 1957.
- ABEL, H.: (Diagnosis of Aortic Insufficiency with the Help of the Ballistocardiogram.) Z. Kreislaufforsch. (Darmstadt), 48:333, 1959. (German)
- ABEL, H.; BAER, B.; and MUELLER, H.: (On the Ballisto-cardiographic Determination of the Stroke Volume.)

  Z. Kreislaufforsch. (Darmstadt), 48:948, 1959. (German)
- ABRAMS, W. B.; and CHESLEY, G. L.: The Ballistocardiogram in Acute Rheumatic Fever. Circulation, 9: 400, March 1954.
- ABRAMS, W. B.; and EDGER, H. D.: A Ballistocardiographic Study of Healthy Young Adult Males. Circulation, 8:738, 1953.
- Abramson, E.: Die Rückstosskurve des Herzens (Kardiodynanogramm). Skand. Arch. Physiol., 66:191, 1933.
- AGRANONIK, G. L.: (Dynamics of the Ballistocardiogram in Patients with Rheumatic Heart Defects.) Vopr. Revm. (Moscow) 3:71-75, 1963. (Russian)
- AGRESS, C. M.; FIELDS, L. G.; WAGNER, S.; WILBURNE, M.; SHICKMAN, M. D.; and MULLER, R. M.: The Normal Vibrocardiogram. Physiologic Variations and Relation to Cardiodynamic Events. Am. J. Cardiol, 8:22, 1961.
- AGUIAR, A. J. DE: (Ballistocardiographic Changes in Mitral Stenosis.) Med. Contemp. (Lisbon), 73:39, 1955. (Spanish)
- AGUIAR, A. J. DE: A Balistocardiografia e a sua Posicao Actual como Processo Fisico de Exploração Cardiocirculatoria. J. Med. (Porto), 24:123, 1954.
- Alcalay, J.: Ballistocardiografia; seu Valor em Clinica Cardiologica. Med. Cir. Farm. (Rio), 248:591, 1956.
- Alcalay, J.: (Comparative Study in Arterial Hypertension of the Ballistocardiogram and Several Routine Tests for Evaluation of the Functional Capacity of the Heart.) Med. Cir. Farm. (Rio), 280: 359, 1959.
- Alfonso, V. T.; Baguena Candela, J.; and Lopez Merino, V.: (Ballistocardiograph and Electro-Cardiograph During Effort and Hypoxemia for Diagnosis of Coronary Insufficiency.) Med. Espan., 32:86, 1964. (Spanish)
- ALIEFF, A.: (Ballistocardiographic Studies on the Frogunder Narcosis and Hypothermia.) In: Proc. 2nd European Symp. on Ballistocardiography (Soc. for Ballistocardiographic Research), Bonn, Germany, Mar. 1961. p. 195. (German) English Translation (Personal) by G. N. Jager, M.S.; edited by Wm. R. Scarborough, M.D.—July 1963.
- ALIEFF, A.; and KLENSCH, H.: Der Einfluss Einiger Gebrauchliger Narkotika auf den Kreislauf des Frosches (Untersuchungen am Intakten Tier). (The Influence of some Common Anaesthetics on the Circulation of the Frog [Studies on the Intact Animal.]) Z. Kreislaufforsch. (Darmstadt), 51:720, 1962. (German) Eng-

- lish translation (personal) by G. N. Jager, M. S.; ed. by Wm. R. Scarborough, M.D., Oct. 2, 1963.
- Alessio, R.: Il Balistocardiogramma nel'Insufficienza Coronorica e Nell'infarto Miocardico. Riforma Med., (Naples) 71:172, 1957.
- ALTMAN, P. L., Comp.: Handbook of Circulation. Prepared under the Direction of a Committee of the National Academy of Science & National Research Council, Philadelphia, W. B. Saunders, 1959.
- ALVAREZ MENA, S.: Ballistocardiografia Clinica. (Clinical Ballistocardiography.) Havana, M. V. Fresneda, 1955. (Spanish) Also in: Circulation, Sept. 1958 by Dr. Aldo Corbascio.
- ALVAREZ-MENA, S., and PEREZ-MONTES, L.: (Ballistocardiograms and Phases of the Cardiac Cycle.) Rev. Cubana Card., 13:147, 1952. (Spanish)
- ALVAREZ-MENA, S.: (Practical Study of Ballistocardiogram.) Med. Latina, 11:93, 1952. (Italian)
- ALVAREZ-MENA, S.; and RODRIGUEZ, R.: (Reference Systems in Ballistocardiography.) Rev. Cubana Card., 13:131, 1952. (Spanish)
- Alzamora Castro, V.: (Ballistocardiography.) Ann. Fac. Med. (Lima), 38:79, 1955. (Spanish)
- Ambrosi, C.: (Practical Ballistocardiography.) Presse Med., 69:12, 1961. (French)
- Anderson, W. H.; Urbach, K.; and Doerner, A. H.: Ballistic Respiratory Variation as Measured by the Electromagnetic Ballistocardiograph. Am. Heart J., 47:15, 1954.
- Andrade, C. de; and Moreire, M. G.: Contribuicao Para o Estudio das Alteracoes Cardiacas na Polineuropatia Amiloidotica Familiar. Gaz. Med. Port., 13:507, 1960. (Portuguese) (English Summary)
- Angelini, F.; and Mattoli, G.: (Standardization of Oscillation and Pick-up Ballistocardiographic Tables.) Folia Cardiol. (Milan), 12:83, 1953. (Italian)
- Angenheister, G.; and Lau, E.: (Seismographic Recording of Heart Activity.) Naturwiss., 16:513, 1929. (German) English Translation by G. N. Jager; edited by Wm. R. Scarborough, Aug. 1963.
- Anshelevich, TsV: (Ballistocardiographic Studies in Anemia.) Klinich. Med. (Moscow), 38:130, 1960.
- Aravanis, C.; and Harris, R.: The Effect of Hydergine on the Cardiovascular System of Elderly People; Electrocardiographic and Ballistocardiographic Studies. J. Am. Geriat. Soc., 7: 920, 1959.
- Arbeit, S. R.; Seminar on Ballistocardiography. Am. J. Cardiol., 2:391, 1958.
- Arbeit, S. R.; and Moret, P.: A Biologic Test for Digitalis Effect. Am. Heart J., 53: 293, 1957.
- ARBEIT, S. R.; JOKL, E.; KOSKELA, B. A.; and McCubein, W. E.: Ballistocardiographic Changes during a 30 day Physical Training Period. Am. Heart J., 54:556, 1957.
- Arbeit, S. R.; Dolan, M. A.; and Stollerman, G. H.: Ballistocardiographic Study of Body Acceleration During the Acute and Convalescent Stages of Rheumatic Fever. Am. Heart J., 49: 647, 1955.

- Arbeit, S. R.; Moret, P.; and Eurman, G.: The Haemodynamics of Hypertension, a Ballistocardiographic Study. A.M.A. Scientific Exhibit, Atlantic City, N.J., June 1955.
- Arbeit, S. R.; Dolan, M. A.; and Stollerman, G. H.: Convalescence From Acute Rheumatic Fever as Reflected by Changed in the Ballistocardiogram of 300 Children. Trans. Coll. of Cardiol., 4: 110, 1955.
- Arbeit, S. R.; and Lindner, N.: A New Full Frequency Range Calibrated Ballistocardiograph; I. Recording Body Ballistics in Displacement Velocity and Acceleration. Am. Heart J., 45: 52, 1953.
- Askovitz, S. I.: Centroids, Vectors, and Least Squares. Am. J. Physiol., 26: 164, 1958.
- Askovitz, S. I.: On the Graphic Representation of Sums of Squares. Sch. Sci. Math., p. 27, Jan. 1958.
- Askovitz, S. I.: The Method of Advancing Centroids Applied to the Graphic Determination of Mean Values and Moving Averages. Sch. Sci. Math., p. 344, Nov. 1958.
- Askovitz, S. I.: A Short-cut Graphic Method for Fitting the Best Straight Line to a Series of Points According to the Criterion of Least Squares. J. Am. Stat. Assoc., 52: 17, 1957.
- AUDIER; RASMUSSEN; FRUCTUS; and AUGE: Contribution of Ballistocardiography to the Examination of Divers in Apnea. Maroc. Med. (Casablanca), 40:638, 1961. (French)
- AUDIER, M. DELPECH: (M Wave Deformities of the Ballistocardiogram.) Arch. Maladies Coeur, 53:941, 1960. (French)
- BABSKII, E. B.; and KARPMAN, V. L.: Dinamakardiografiya. (Dynamocardiography.) Moscow, State Pub. House for Medical Literature (Medgiz), 1963. English translation of original book by NASA, Wash., D.C., for FAA as NASA-TT-F-205, Apr. 1964. 140 p. 63 figs.
- BABSKII, E. B.; KARPMAN, V. L.; SUDOVSKAIA, G. V.; and TISHCHENKO, M. I.: (Physico-physiological High Frequency Ballistocardiographic Examination of Normal Men.) Kardiologia, 2:44, 1962. (Russian)
- Babskii, E. B.; and others: Selected Translations on Dynamocardiography in the USSR. Compilation of 7 papers translated into English from the Russian by U.S. Joint Public. Research Service, Wash., D.C., for FAA as JPRS R-2039-D, 1962; FAA 2-9627-1
- Babskii, E. B.; and Karpman, V. L.: Dynamocardiography. *In:* Digest of the 1961 Intern. Conf. on Medical Electronics, N.Y.C., July 1961. p. 258 (Abstract)
- Babskii, E. B.; Venediktov, A. B.; Karpman, V. L.; and Tishchenko, M. I.: (The Dynamocardiograph.) Biophysics, 5:703, 1960. Biofizika, 5:620, 1960. English translation from Russian.
- Babskii, E. B.; Karpman, V. L.; Petrov, G. M.; and Shachkova, A. I.: Use of an Electronic Differentiating Device in Physiological Studies. Biophysics, 4:102, 1959. English translation from Russian.
- Babskii, E. B.; and Karpman, V. L.: Analysis of the Phases of Cardiac Contraction in Terms of the Ballisto-

- cardiogram. Trans. Acad. Sci. USSR, 125:377-380, 1959. English translation of article in Dokl. Akad. Nauk. SSSR (Moscow), 125:1166, 1959.
- Babskii, E. B.; and Karpman, V. L.: The Differences of Principle Between Ballistocardiography and Dynamocardiography. Biophysics, 3:563, 1958. English translation from Russian, 3:596, 1958.
- BABSKII, E. B.; The Technique and Some Results of the Investigation of the Mechanical Manifestations of Heart Action in Man in the Normal and Pathological States. Biophysics, 2:20, 1957. English translation from Russian.
- BABSKII, E. B.; and KARPMAN, V. L.: (Collection: Problems of Modern Physiology.) Tbilsi, p. 501, 1956. (Russian)
- BABSKII, E. B.; and KARPMAN, V. L.: (Time Relations between Electrical and Mechanical Manifestations of the Activity of the Ventricles in Man.) Acad. Sc. Georgian SSR, 501: 1956. (Russian)
- Babskii, E. B.; Vinogradova, T. S.; and Karpman, V. L.: (Use of Cardiodynamography in the Surgical Clinic.) Khirurgiya (Sofia), Vol. No. 1, p. 60, 1954. (Russian)
- BABSKII, E. B.; VINOGRADOVA, T. S.; GURFINKEL, V. S.; and YAKOBSON, Y. S.: (Physical Nature of the Cardiohemodynamogram) Dokl. Akad. Nauk SSSR, 92:185, 1953. (Russian) English translation by U.S. Joint Public. Res. Serv., Washington, D.C., as JPRS No. R-2039-D, Feb. 2, 1962.
- BABSKII, E. B.; VINOGRADOVA, T. S.; GURFINKEL, V. S.; and MESHALKIN, E. N.: (No Title) Dokl. Akad. Nauk. SSSR, 88: 365, 1953. (Russian)
- BABSKII, E. B.; MYASNIKOV, A. L.; GURFINKEL, V. S.; YAMYSLOVA, K. N.; and ROMEL, E. L.: (First Attempts at Clinical Use of Cardiohemodynamography). Terapavt. Arkh. 24:68, 1952. (Russian) English Translation by U.S. Joint Public Res. Serv., Washington, D.C., as JPRS No. R-2039-D, Feb. 2, 1962.
- BABSKII, E. B.; GURFINKEL, V. S.; ROMEL, E. L.; and YAKOBSON, Y. S.: (A New Method of Investigating Cardiac Action and Respiration in Man.) Dokl. Akad. Nauk, SSSR, 83:957, 1952. (Russian) English translation by U.S. Joint Public. Res. Serv., Wash., D.C., as JPRS No. R-2039-D, Feb. 2, 1962.
- BAEVSKII, R.M.: See also Bayevskiy
- BAEVSKII, F.M.; BELIAEVA, F.N.; and SEL'TSER, V.K.: (A Method for Mass Ballistocardioscopy) Soviet Med., 24:105, 1960. (Russian)
- BAEVSKII, R.M.: (The Technic of Ballistocardiography) Terapevt. Arkh., 31: 48, 1959. (Russian)
- BAEVSKII, R. M.: (Possibility of the Utilization of a Ballistocardiographic Method in Medical Examination in Aviation.) Voenno-Med. Zh. (Moscow), 12:48, 1958. (Russian)
- BAEVSKII, R. M.: (Problems of Practical Ballistocardiography.) Klinich. Med., 36:93, 1958. (Russian)
- BAEVSKII, R. M.: (Method of Ballistocardiography in Large Scale Studies.) Voenno-Med. Zh., (Moscow), 3:37, 1958. (Russian)

- BAKER, B. M., JR.; SCARBOROUGH, W. R.; DAVIS, F. W., JR.; MASON, R. E.; SINGEWALD, M. L.; and DEUCHAR, D. C.: Balkistocardiography. (Editorial by Dr. A. McG. Harvey) Am. J. of Med., 27: 295, 1954.
- Baker, B. M., Jr.; Scarborough, W. R.; Singewald, M. L.; Mason, R. E.; and Davis, F. W., Jr.: Ballistocardiography in Patients with Coronary Artery Disease and in Apparently Normal Persons. Geriatrics, 7:246, 1952. (Abstract)
- BAKER, B. M., Jr.; SCARBOBOUGH, W. R.; MASON, R. E.; and SINGEWALD, M. L.: Coronary Artery Disease Studied by Ballistocardiography: a Comparison of Abnormal Ballisticardiograms and Electrocardiograms. Trans. of Am. Clin. Climatol. Assoc., 62:191, 1951. (1950)
- BAKER, B. M., JR., SCARBOROUGH, W. R.; SINGEWALD, M. L., MASON, R. E.; and DAVIS, F. W., JR.: Ballistocardiography in the Study of Patients with Coronary Artery Disease and of Apparently Normal Persons. In: Amer. Assoc. for the Adv. of Sci. Meeting, Philadelphia, Pa. December 30, 1951.
- Bakulev, A. N.; Babskii, E. B.; and Karpman, V. L.: (Effectiveness of Surgical Treatment of Mitral Stenosis According to Cardiohemodynamographical Data.) Klinich. Med. 34: 36, 1956. (Russian) English translation by U.S. Joint Public. Res. Serv., Washington, D.C., as JPRS-R-2039-D, Feb. 2, 1962.
- Balaguer-Vintro, T.; and Vidarte, Z. M.: El Balistocardiograma en la Estenosis Mitral. Rev. Espan. Cardiol., 8:381, 1954.
- BALDRIGHI, V.; MONTEMARTINI, C.; and CALDERONI, A. C.: (On the Cardiac Ejection Curve.) Boll. Soc. Ital. Biol. Sper., 31: 349, 1955. (Italian)
- Ballistocardiograms in Cardiac Diagnosis. J. Iowa Med. Soc., 52:458, 1952.
- Ballistocardiograph. Heart Bull. (Houston, Tex.), 2:17, 1953.
- Ballistocardiography. Brit. Med. J. (London), 4995: 761, Sept. 29, 1956.
- Ballistocardiography. Med. J. (Australia), 1:675, 1953. (Ballistocardiography.) Riforma Med. (Naples), 66:744, 1952.
- Ballistokardiografia. (Ballistocardiography and Clinical Significance) Klinich. Med. (Moscow), 34(6):12, 1956. (Russian)
- Balsac, H. de; and Dollopoulis, T.: (The Normal Ballistocardiogram. A Study of 50 Cases.) Cardiologia (Berne), 23:36, 1953. Also in: Circulation, 9:307, 1954. (Abstract)
- Bandiera, G.; Garello, L.: (Ballistocardiography. I. Origin of the Tracing Recording Techniques and Interpretation.) Arch. Maragliano Pathol. Clin. (Genoa), 9:789, 1954. (Italian)
- Bandiera, G.; Garello, L.: (Ballistocardiographical Studies. III. Ballistocardiograms of Healthy Persons with Different Constitutional Characteristics.) Arch. Maragliano Pathol. Clin. (Genoa.), 9(5): 1303-10, 1954. (Italian.)

- BARCROFT, H.; and STARR, I.: Comparison of the Actions of Adrenalin and Nor-adrenalin on the Cardiac Output in Man. Clin. Sci., 10: 295, 1951.
- BARRERA, F.; LEIRO RUIZ, A.; BUSTAMENTE, R.; and KAUFMAN, J.: Comparative Study of Electrocardiograms and Ballistocardiograms Taken Directly from the Body in Coronary Artery Disturbances. *In:* 4th Inter-American Congress of Cardiology, Buenos Aires, Argentina, 1952. Summarized in: Am. Heart J., 46: 929, 1953.
- BARRERA, F.; LEIRO RUIZ, A.; PONS, R.; and KAUFMAN, J.: (Dock's Electromagnetic Ballistocardiograph Taken Directly from Body: Normal Cases.) Rev. Cubana Cardiol., 12:1, 1951. (Spanish)
- BARRERA, F.; and others: (Ballistocardiogram in Angina Pectoris and in Myocardial Infarct Due to Thrombosis of Coronary Arteries.) Rev. Cubana Cardiol., 12:63, 1951. (Spanish)
- Basiliou, B.; and Israel, A. H.: (Usefulness in Daily Practice of Measurement of Cardiac Output and of Ballistocardiography.) Rev. Med. Moyen-Orient (Beyrouth), 11:488-95, 1954. (French)
- BATRAK, A.: (Ballistocardiogram of Patients with Subacute Rheumocarditis with Situs Inversus Viscerum.) Klinich. Med., 39:141, 1961. (Russian)
- BATTAGLIA, C.; and Broglio, G.: (The IJ Segment of the Ballistocardiogram in Normal Subjects Exposed to Anoxia.) G. Clin. Med., 42:253, 1961. (Italian)
- BAYEVSKIY, R. M.: See also Baevskii.
- BAYEVSKIY, R. M.; and GAZENKO, O. G.: (A Few Problems of Physiology of Circulation During Weightlessness.) *In:* Intern. Astronautics Fed., Paris, Sept./Oct. 1963.
- BAYEVSKIY, R. M.; and KARAZAN, L. N.: (Registration of Seismocardiograms on Dogs.) *In:* Problems of Space Biology, Vol. I, p. 418-421, 1962. (Russian) English Translation by NASA, Wash., D.C., as NASA-TT-F-174, Nov. 1963.
- BAYEVSKIY, R. M.: Fundamentals of Practical Ballistocardiography. Moscow, Medgiz, 1962. (Russian) English Translation by U.S. Joint Publication Res. Service, Wash., D.C., for OTS, Wash., D.C., as JPRS No. 18967; OTS 62-21713.
- Beasley, H. E.: Clinical Evaluation of the Cardiac Status; the A. D. Becker Memorial Lecture. J. Am. Osteopath. Assn., 52:349, 1953.
- Benedetti, A.; and Bugaro, L.: (The Ballistocardiogram in Liver Cirrhosis; Influence of Ascites.) Gior. Clin. Med. (Parma), 37(6): 812, June 1956. (Italian)
- Benitex, R.; and Suarez, R.: Ballistocardiografia. Bol. Assoc. Med. Puerto Rico, 43: 451, 1951.
- BERCONSKY, I.; CHAIT, L. O.; WIGUTOV, J.; and BARAN-CHUK, M.: El Balistocardiograma Durante la Evolucion del Embarazo. (The Ballistocardiogram During the Course of Pregnancy.) Arch. Inst. Card. (Mexico), 28:314, May-June, 1938. (Spanish)

- Berman, B.; Braunstein, J. R.; and McQuire, J.: The Effect of Meals on the Electrocardiogram and the Ballistocardiogram in Patients with Angina Pectoris. Circulation, 1: 1017, 1950 (Part II).
- Berreta, J. A.; Buzzi, and Mom, A. M.: (The Ballistocardiogram in Generalized Scleroderma.) Sem. Med., (B. Aires) 115:558, 1959. (Spanish)
- Bestugin, A. V.; Ivanov, D. I.; Malkin, V. B.; and Prutskoi, A. N.: P'ezoelektricheskii Datchik dlia Registratsii Ballistokardiogrammy na Elektrokardiografe. (Piezo-elec. Counter for Registration of Ballistocardiographic Changes on an Electrocardiograph.) Fiziol. Zh. SSSR, 43:906, 1957. (Russian)
- Bettencourt, J. M. de: L'Electroca Diogramme et le Balistocardiogramme de la Femme Enceinte. Année Cardiol. Intern., V: 287, 1956.
- BETTENCOURT, J. M. DE: (Chronologic Relations of Ballistocardiogram and Rheocardiogram.) Gaz. Med. Port., 7:87, 1954. (Port.)
- Bevilotti, V.: (The Normal Limits of the Ballistocardiogram.) Boll. Soc. Ital. Biol. Sper., 29:812, 1953.
- BIORCK, G.; AXEN, O.; WULFF, H. B.; and OVERBECK, W.: The Evaluation of Examination Methods for Diagnosis and Operative Indications in Combined Mitral Defects. Z. Kreislaufforsch (Darmstadt). 43:673-91. 1954
- BIORCK, G.: (Ballistocardiography.) Nord. Med., (Stockholm) 49:624, 1953.
- BIORCK, G.; and THORSON, A.: (Ballistocardiography in Clinical Practice.) Cardiologia (Basel), 21:477, 1952.
- BIXBY, E. W.: Symposium on Cardiovascular Diseases; Ballistocardiography. An Introduction for the Clinician. Medical Clinics of North America, 38: 1601, 1954.
- BIXBY, E. W.; and HENDERSON, C. B.: A Method of securing the Direct Body Ballistocardiogram by Means of a Microscope Giving a Record Readily Calibrated. Circulation, 8: 578, 1953.
- BIXBY, E. W., Jr.: A Clinician's Approach to the Ballistocardiogram. Am. J. Cardiol., 4:508, 1959.
- BIXBY, E. W., Jr.: Ballistocardiography: A Brief Outline. Bull. of the Benj. Franklin Clinic of the Penna. Hospital, 1:19, Nov. 1956.
- Black, A.; and Delmonico, E., Jr.: An Evaluation of Three Revascularization Procedures in the Rehabilitation of the Coronary Patient. Am. J. Cardiol., 3:68, 1959.
- BLACKMAN N. S.: Identification of Complexes of Electromagnetic Ballistocardiogram in Single Channel. Am. Heart J., 43:840, 1952.
- Bober, S.: (Studies on Ballistocardiography). Rozpr. Wydz. Nauk. Med., 2:5, 1957. (Polish)
- Bober, S.: (Effort Ballistocardiography in Bicycle Racers.) Polski Tygod. Lekar., 12: 826, 1957. (Polish)
- BOBER, S.: (Time Relationships in Ballistocardiography in Athletes.) Polski Arch. Med. Wewnetrznej (Warsaw), 27:455, 1957. (Polish)
- Bober, S.: Balistokardiografia, Jej istota i Zastosowanie w Klinice. Postepy Kardiologii, 4:35, 1956.

- Bober, S.: Kardiohemodynamografia: Postepy Wiedzy Med. (Warsaw), 3(1): 37. Jan.-Mar. 1956.
- Bober, S.; and Weber, M.: Zaburzenia w Uktadzie Krazenia. Polskie Arch. Med. Wewnetrznej (Warsaw), 5:923.1955.
- Bober, S.: (Effects of Efforts on Ballistocardiographic Curve.) Acta Physiol. Polon. (Warsaw), 5(3): 291–301, 1954. (Polish)
- BOCCARDELLI, V.: (Normal and Pathological Ballisto-cardiogram.) Progr. Med. (Naples), 9:146, 1953.
- Bodrogi, G.: (Data on the Origin of Certain Waves in Ballistocardiogram.) Magy. Belorv. Arch. (Budapest), 11:49, 1958.
- Bodrogi, G.: Ballistocardiographic Findings on the J Wave. Am. Heart J., 56:95, 1958.
- Bodrog, G.: Uber das Entstehen Einzelner Wellen im Ballistokardiogramm. (Origin of Single Waves in Ballistocardiogram.) Z. Kreislaufforsch. 47:491, June 1958
- BODROGI, G.; PLENCZNER, S.; HAJDU, J.; and SZEPESSY,
  S.: Az Acceleratios Ballistocardiographiarol. (Acceleratian Ballistocardiography.) Magy. Belorv. Arch. (Budapest), 10:33, Apr.-June 1957. (Hungarian)
- Bodrog, G.: (Observations on the Genesis of Ballisto-cardiographic I-Waves.) Kardiol. Zentralinst. Schulwesen (Budapest), A. Ges. Inn. Med., 12:90, 1957.
- Bodrogi, G.; Plenczner, A.; and Pamlenyi, S.: Uber das Vorkommen Hoher Diastolischer Wellen auf Akzeleratons- Ballistokardiogrammen. (Incidence of High Diastolic Waves in Acceleration—Ballistocardiograms.) Z. Kreislaufforsch., 46:900, Dec. 1957.
- Bodrogi, G.: and Dusoczky, A.: Evaluation of Ballistocardiograms of Athletic Competitors. Wien. Klin. Wochschr. (Vienna), 69:799, 1957.
- BOITANO, H. C.: (Ballistocardiograms of Natives of High (Altitudes.) Anales Fac. Med. (Lima), 36:333, 1953. (Spanish)
- BORHANI, N. O.; BUECHLERY, R. W.; and HECHTER, H. H.: Ten Year Follow-up of Coronary Heart Disease Mortality in a Previously Examined Population. In: 4th World Congress of Cardiology, Mexico City, Oct. 7-13, 1962. p. 38 (Abstract)
- Borszewski, J.; Rozwadowska-Dowzenko, M.; Olejniczak, P.; Jazienicki, B.; and Hryniewiecki, J.: Ocena Balistokardiograficzna Chorych po Wstrazyknieciu Dotetniczum t thenu w Przypadkach Zmian Zarostowych w Naczyniach. (Ballistocardiography Following Intra-arterial injection of Oxygen in Obliterative Vascular Lesions.) Polskie Arch Med. Wewnetynej (Warsaw), 28:748, 1958. (Polish)
- Boszormenyi, E.; and Chan, V. P.: (On the Behaviour of the Ballistocardiogram in Some Rhythm Disorders of the Heart.) Cor. Vasa, 4:125, 1962. (German)
- Boszormenyi, E.: (Effect of Isolanid Tablets on Pathological Cardiac Dynamics. Orv. Hetilap. (Budapest), 102:1700, 1961.
- BOUCHEAU, PIERRE.: Ballistocardiogramme des Sportifs Professionels. Lyon, 1954.

- BOUHUYS, A.: (High Frequency Ballistocardiography. I: Proceedings.) Koninkl. Ned. Akad. van Wetenschap. (Series C), (Amsterdam), 55:126, 1952.
- BOUHUYS, A.: (High Frequency Ballistocardiography. II: Proceedings.) Koninkl. Med. Akad. van Wetenschap. (Series C), (Amsterdam), 55:135, 1952.
- BOYLE, M. M.; WEGRIA, R.; CATHCART, R. T.; NICKERSON, J. L.; and LEVY, R. L.: Effects of Intravenous Injection of Nicotine on the Circulation in Normal Persons and in Patients with Cardiovascular Disease. Am. Heart J., 34:65, 1947.
- Bozal, U. V.; Merlen, J. J.; and Alonzo, L.: (Effects of Pulmonary Collapse on the Ballistocardiograms.) Arch. Maladies Coeur (Paris), 47: 1026-32, 1954. (French)
- Brandt, J. L.; Caccese, A.; and Dock, W.: Slitkymographic Evidence that Nitroglycerine Decreases Heart Volume and Stroke Volume While Increasing the Amplitude of Ballistocardiographic Waves. Am. J. Med., 12:650, 1952.
- Brandt, J. L.; Cacese, A.; Dock, W., and Schrager, A.: The Motion of the Thorax During the Heart Cycle: a Comparison of Longitudinal Lateral and Dorso-ventral Ballistocardiograms. J. Clin. Invest., 30:971, 1951.
- Braun, K.; and Rosenberg, S. Z. (The Effect of Foliandrin on the Ballistocardiogram.) Cardiologia (Basle), 29; 237-40, 1956.
- Braunstein, J.: The Ballistocardiogram. Springfield, Ill., Chas. C. Thomas, 1952.
- Braunstein, J.; Oelker, C. E.; and Gowdy, R. C.: Design of a Two-Dimensional Ballistocardiograph. J. Clin. Invest. 29: 1219, 1950.
- Braunstein, J. R.; and Morris, G. L.: A Study in Frontal Plane Vectorballistocardiography. Circulation, 12:3, Sept., 1955.
- Braunstein, J. R.; and Morris, Gwendolyn L.: A Two-Dimensional Ballistocardiographic Study of 59 Apparently Normal Persons. An Analysis of the IJ Segment as it Relates to Body Surface. Circulation, 11:767. May 1955.
- BRAUNSTEIN, J. R.: A Proposed Nomenclature and Convention for Recording the Ballistocardiograms. Circulation, 7:927, 1953.
- Braunwald, E.; and Morrow, A. G.: Sequence of ventricular Contraction in Human Bundle Branch Block. Am. J. Med., 23:205, 1957.
- Bravo Olalla, S.: L'Utilite du Balistocardiogramme dans l'Insuffisance Coronarienne. In: Proc. of 3rd European Symposium for Ballistocardiography, Brussels, Belgium, April 16-17, 1962, p. 164.
- Bravo Olalla, S.; Martinex De Salinas, J. L.; and Castro Garcia, L. F.: (Pre-operative and Post-operative Ballistocardiography in Thoracopulmonary Surgery [Thoracoplasty, Lobectomy, and Pneumonectomy]) Rev. Clin. Espan. (Madrid), 59(6): 401-9, July-Dec., 1955. (Spanish)

- Breitinger, H.; and Zipp, H.: Das Ballistokardiogramma als Diagnostische Routine- Methode. (Ballistocardiography as a Routine Diagnostic Method.) Med. Klin. (Berlin), 53:1605, 1958. (German)
- Breitinger, H.: (Effect of Nicotine on Ballistocardiography in Circulatory Disorders and in Healthy Subjects.) Arch. Physik. Therapie (Leipzig), 8(4):262, July-Aug., 1956.
- Bridwell, T.; Jenns, R. M.; and Greene, D. G.: An Evaluation of Starr's Equation for the Prediction of Stroke Volume. Circulation, 14:250, 1956.
- Brofman, B. L.; Arbeit, S. R.; and Adicoff, A.: Coronary Heart Disease—Ballistocardiographic Evaluation of Surgical Treatment. Am. J. of Cardiol., 3:54, 1959
- Broglio, G.; Busonera, G.; and Masiero, L.: (Ballistocardiographical Studies in Patients with Arthropathy Treated with Sulphurous Mud Therapy.) Friuli. Med., (Udine), 16:278, 1961.
- BROTMACHER, LEON: The Normal Ballistocardiogram. Brit. Heart J., 18: 145, April, 1956.
- Brown, D. E. S.: The Design of the Ballistocardiograph. J. Clin. Invest., 21: 294, 1942.
- Brown, F. J.: Ballistocardiographic Study of Marathon Runners. Lancet, 77:89, 1957.
- Brown, F. J.: Clinical Ballistocardiography in Office Practice. J. Med. Soc. of N.J., 49: 251, 1952.
- Brown, H.; Rinzler, S.; and Benton, J. G.: Correlation of the Ballistocardiogram with Work Performance and Energy Cost for Guidance in Rehabilitation of Cardiac Patients. Circulation, 7:740, 1953.
- Brown, H. R., Jr.; DeLalla, V., Jr.; Epstein, M. A.; and Hoffman, M. J.: Clinical Ballistocardiography. N.Y., Macmillan Co., 1952.
- Brown, H. R., Jr.; Hoffman, M. J.; and DeLalla, V., Jr.: Ballistocardiographic Findings in Patients with Symptoms of Angina Pectoris. Circulation, 1:132, 1950.
- Brown, H. R., Jr.; Hoffman, M. J.; Epstein, M. A.; and Delalla, V., Jr.: The Use of Abdominal Supports in Patients with Angina Pectoris as Selected by the Ballistocardiograph. J. Clin. Invest., 29:799, 1950. (Abstract)
- Brown, H. R., Jr.; and DeLalla, V., Jr.: Ballistocardiogram, Description and Clinical use. Am. J. Med., 9:718, 1950.
- Brown, H. R., Jr.; Hoffman, M. J.; and DeLalla, V., Jr.: Ballistocardiogram in Coarctation of the Aorta. New Eng. J. Med. 240: 715, 1949.
- Brown, H. R., Jr.; and DeLalla, V., Jr.: The Diagnostic Significance of the Respiratory Variation in the Ballistocardiograph. J. Clin. Invest., 27: 526, 1948.
- Brown, H. R., Jr.; and Pearson, R.: A New Electronic Method for Simultaneous Recording of the Ballistocardiograph and Electrocardiograph. Am. Heart J., 35:756, 1948.
- Brumlik, J.: On the Nature of Normal Tremor. Neurology, 12:158-179, 1962.

- BRUMMELEN, A. G. W. VAN; SCARBOROUGH, W. R.; and JOSENHANS, W. K. T.: On the Elimination of Pulse Wave Velocity in Stroke Volume Determination from the Ultra-Low-Frequency Displacement Ballistocardiogram. In: Proc. Ballistocardiograph Res. Soc., Atlantic City, N.J., April 27, 1963. Also in: Amer. J. Cardiol., 12: 580, 1963. (Abstract); Am. Heart J., 67: 374, 1964.
- Bruno, E.; Clemente, R.; Beccuria, G. C.; and Cardini,
   G.: (Bidirectional Ballistocardiographic Study in Eight
   Cases of Dextrocardia Due to Situs Viscerum Inversus.)
   Minerva Cardioangiol., 7:413, 1959. (Italian)
- Bruno, E.; Clemente, R.; and Cardini, G.: (The Ballistocardiogram in Atrio-ventricular Block.) Minerva Med., 51:1923, 1960. (Italian)
- Buchanan, J.; and Cameron, A. J. V.: Ballistocardiographic Smoking Tests in Young Patients with Diabetes Mellitus. In: Proc. 2nd European Symp. for Ballistocardiography, Bonn, Germany, Mar. 27–28, 1961, p. 99. (Abstract)
- Bucher, H. W.: (Ballistocardiographic Determination of Stroke Volume After Intravenous Administration of Guanethidine.) Cardiologia, 40:298, 1962.
- Buckingham, William; Sutton, George C.; Rondinelli, Ray; and Sutton, Don C.: Interpretation of the Velocity Measurement Ballistocardiogram. Am. Heart J., 46: 341, 1953.
- Buckingham, W. B.; Sutton, G. C.; Wendel, G.; Sutton, D. C.: A Pharmacodynamic Study of the Relationship Between Hypertension and the Deep K Stroke Pattern of the Ballistocardiogram. Quart. Bull. Northwestern Univ. Med. School, 27:21, 1953.
- BUDOVARI, I.: Charges in Ballistocardiograms of Patients with Mitral Stenosis. Soviet Med., 23:43, 1959.
- Buff, I. E.: The Ballistrocardiogram after a Heavy Meal; Diagnostic Value in Patients with Suspected Coronary Artery Disease. Am. J. Cardiol., 3:11, 1959.
- Buff, I. E.: Effect of Cigarette Smoking in the Normal Person. J. Am. Med. Assoc., 157: 569, 1955.
- Buff, I. E.: Newer Developments in Cardiography. Am. Practitioner Dig. of Treat., 6: 205-9, 1955.
- Buff, I. E.: Ballistocardiography as an Office Procedure. West Va. Med. J., 48: 325, 1952.
- Bugaro, L.; and Petrin, G.: Il Balistocardiogramma Nelle Nefropatie Mediche. (Ballistocardiography in Med. Kidney Diseases.) Giorn. Clin. Med., 38:661, 1957. (Italian)
- Bugaro, L.; and De Castro, B.: (Ballistocardiographical Examination in Congenital Malformations of the Cardiovascular System.) Folia Cardiol., 15:129-45, 1956. (Italian)
- Burger, H. C.: (Ballistocardiography and Vectorcardiography. Similarity and Difference. *In:* Proc. of 3rd European Symp. for Ballistocardiography, Brussels, Belgium, Apr. 16-17, 1962, p. 88.
- Burger, H. C.: Ballistocardiography as a Result of Cooperation Between Sciences. Am. Heart J., 59:791, 1960.

- Burger, H. C.; Noordergraff, A.; Kamps, H. J. L.: Physical Basis of Ballistocardiography. V. The Distortion of the BCG Caused by the Movement of the Heart Inside the Body. Am. Heart J., 53: 906, June 1957.
- Burger, H. C.; Noordergraaf, A.; Korsten, J. J., and Ullersma, P: Physical Basis of Ballistocardiography. IV. The Relative Movement of Subject and Ballistocardiograph. Am. Heart J., 52:653, Nov. 1956.
- Burger, H. C.; and Noordergraaf, A.: Physical Basis of Ballistocardiography. III, Am. Heart J., 51:179 Feb. 1956.
- Burger, H. C.; and Noordergraaf, A.: Physical Basis of Ballistocardiography. II. The Quantities that can be Measured with Different Types of Ballistocardiographs and Their Mutual Relations. Am. Heart J., 51: 127, Jan. 1956.
- Burger, H. C.: Ballistocardiography. Internal Report, Physics Laboratory, Univ. of Utrecht, Vol. 962, 1954.
- Burger, H. C.; Noordergraaf, A.; and Verhagen, A. M. W.: Physical Basis of the Low-frequency Ballistocardiograph. Am. Heart J., 46: 11, 1953.
- Burger, H. C.: Les Bases Physiques de la Balistocardiographe. (Physical Basis of Ballistocardiography.) In: 1er Congress Europeen de Cardiologie, Londres, 1952.
- Busial, V. T.; Vasilescu, I.; and Stanciu, L.: (Electrocardiographic and Ballistocardiographic Studies in Human Trichinosis.) Wiadomosci Parazytol., 6:335, 1960. (Polish)
- Busnengo, D. E.: Valutazione Quantititiva del Balistecardiogramma Dopo Lavoro Muscolare. Riv. Med. Aeron, Spaziale (Rome), 23:385, 1960.
- Busnengo, E.: Funzionalita Cardio-circolatoria Dopo Intenso e Protratto Lavoro Muscolare: Comportamento del Balistocardiogramma. Ati Congresso Internaz. Med. Aeron. Spaziale, 2: 27, 1959.
- Bustamante Abriola, R. E.: Estudio Balistocardiografico de la Angina de Pecho. Tesis Doctorado en Medicina, Universidad de la Habana, 1942.

C

- CABALLERO, T. D.: (Ballistocardiograph by Means of Regulated Respiration.) Rev. Clin. Espan. (Madrid), 40:395, 1951. (Spanish)
- CACCESE, A.: Effects of Artificial Pneumoperitoneum on Ballistocardiograph Patients with Chronic Pulmonary Disease. Am. Rev. Tuberc., 66: 52, 1952.
- CACCESE, A.; and SCHRAGER, A.: The Effects of Cigarette Smoking in the Ballistocardiogram. Am. Heart J., 42:589, 1951.
- CACCURI, S.; and Rossi, L.: Il Balistocardiogramma nella Silicosi polmonare. (Ballistocardiography in Pulmonary Silicosis.) Folia Cardiol. (Milan), 16:497, 1957 (Italian)
- CAINI, B.: (Ballistocardiogram in Aged; Ballistocardiographic Interpretation in Coronary Atherosclerosis.) Giorn. Gerontol. (Florence), 2:55, 1954.

- CAINI, B.: (Study of the Normal Ballistocardiogram.) Folia Cardio. (Milan), 12:595, 1954. (Italian)
- CAINI, B.; MICHELI-PELLEGRINI, G.; and PANUCCIO, P.: (Ballistocardiography in Branch Block and in Wolff-Parkinson-White Syndrome.) Giorn. Clin. Med., 35: 700, 1954. (Italian)
- Calandre Diaz, L.: Ballistocardiographia. Rev. Espan. de Cardiol. (Madrid), 6:3, 1952.
- CALDERON-MONTERO, J.: (Ballistocardiogram of the Dog.) Rev. Espan. Fisiol. (Barcelona), 13:115, 1957. (Spanish) (Summary in English)
- CALICER, R. F.: (The Normal Human Ultra-low Frequency Ballistocardiogram.) Prensa Med. Arg. (Buenos Aires), 46:1225, 1959. (Spanish)
- CALLAHAN, J. A.; BRANDENBURG, R. O.; and SWAN, H. J. C.: Pulmonary Stenosis and Ventricular Septal Defect with Arteriovenous Shunts (A Clinical and Hemodynamic Study of Eleven Patients). Circulation, 12:994, Dec. 1955.
- CAMBRA MERCADER, R.; and MARTINEZ GONZALES, M.: (Ballistocardiographic Expression.) Anales Med. (Barcelona), 41:526, 1955. (Spanish)
- CANIGGIA, A.; BERTELLI, G.; and FABRIZ, G.: (The Ballistocardiogram in A-V Heart Block.) Cardiologia (Basel), 27(6): 319, 1955.
- CANTOGNO, L. V. D.; PIERRE, M. D. L.; et al.: Rilievi e Considerazioni sul Valore di Alcune Indagini Semeiotico-strumentali per la Diagnosi delle Complicazioni Cardio-cascolari nei Diabetici. Minerva Medica, 49:57, 1958. (Italian)
- CAPONE-BRAGA, M.; and Pozzi, L. L.: (Ballistocardiogram and Increase of Minute Volume.) Riv. Critica Clin. Med., 53:297-307, 1953. (Italian)
- CAPONE-BRAGA, M.; and Pozzi, L. L.: (Ballistocardiographic Modifications Induced in Normal Patients by Administration of Epinephrine and Non-epinephrine.) Riv. Crit. Clin. Med., 53:285-296, 1953. (Italian)
- CAPONE-BRAGA, M.; and POZZI, L. L.: (Ballistocardiogram of Pregnant Females with Mitral Cardiopathies.)
  Riv. Critica Clin. Med., 53:271-284, 1953. (Italian)
- CAPONE-BRAGA, M.; and Pozzi, L. L.: (Ballistocardiogram in Pregnancy.) Riv. Critica Clin. Med., 53:258–270, 1953. (Italian)
- Capone-Braga, M.; and Pozzi, L. L.: (Ballistocardiographic Aspects of States of Diminished and Increased Thyroid Function; First Report.) Riv. Crit. Clin. Med., 52:145, 1952. (Italian)
- CAPRETTI, G.; MAGNANI, B.; and MARINI, A.: (Ballistocardiography in Clinical Practice.) Giorn. Clin. Med., 35:493-526, 1954. (Italian)
- CAPUANI, G. F.: Il Balistocardiogramma nella Persona Anziana (Allomorfismo Dismorfismo). (The Ballistocardiogram in Elderly People.) Osped. Maggiore Novara Minerva Med. (Turin), 48(1)39(1747), 1957.
- CAPUANI, G. F.: La Balistocardiografia. Med. Intern., Jan., Feb. 1954. (Italian)

- CAPUANI, G. F.: La Balistocardiografia nella Practica Clinica. Med. Intern., Mar., Apr., 1954.
- CARAMELLI, Z.; BARBATO, E.; TOCCHIO, H.; BORROTCHIN, D.; and DECOURT, L. V.: (Ballistocardiogram. I. Normal Aspects and Comparative Study with the Electrocardiogram in Cases of Chagas' Myocarditis.) Rev. Hosp. Clin. Fac. Med. (S. Paulo), 16: 241, 1961. (Port.)
- CARAMELLI, Z.; BARBATO, E.; TOCCHIO, H.; CASTIGLIONI,
  R.; and DECOURT, L. V.: (Ballistocardiogram. H. Aspects Seen in Mitral Stenosis Before and After Commissurotomy [1-6 yearsl.)
  Rev. Hosp. Clin. Fac. Med.
  (S. Paulo), 16:247, 1961. (Port.)
- CARAMELLI, Z.; BARBATO, E.; TOCCHIO, H.; and DECOURT, L. V.: (Ballistocardiogram. III. Study of Normal Cases and Cases of Coronary Insufficiency Followed-up for 6 Years.) Rev. Hosp. Clin. Fac. Med. (S. Paulo), 16: 251, 1961. (Port.)
- CARDINI, G., CLEMENTE, R.; and Bruno, E.: (The Ballisto-cardiogram in the Prognosis of Myocardial Infarct.)
  Minerva Cardioangiol., 10:1, 1962. (Italian)
- CARRERA R. DE: Modificaciones dela Onda K del Balisto-Cardiogramma Vajo la Accion de un Ganglioplejico. (Changes in the K Wave of the Ballistocardiogram Under the Effect of a Ganglioplegic Agent.) Rev. Cubana Card. 19:46, 1958. (Spanish)
- CARUCCI, L. V.: (Phonocardiography and Ballistocardiography in Medical Practice.) Ann. Med. Nav. (Rome), 63:603, 1958. (Italian)
- CASPARI, V. R. M.; KLENSCH, H.; and KOTTER, J.: Das Schlagvolumen des Herzens bei Plotzlicher Verminderung des Peripheren Widerstandes. Z. Keislaufforsch., 49:412, 1960.
- Cassiman, W.; and Enderle, J.: Confrontation ECG-BCG Apres Infarctus Myocardique. In: Proc. of the 3rd European Symposium for Ballistocardiography, Brussels, Belgium, April 16-17, 1962, p. 156
- Cassiman, W.: Origine de l'Ende H. d'Acceleration. In: Proc. 2nd European Symp. for Ballistocardiography, Bonn, Germany, Mar. 27-28, 1961, p. 145.
- Cassiman, W.; and Enderle, J.: (Practical Value of the Ballistocardiogram in Coronary Artery Disease.) Acta. Card. (Brussels), 14:29, 1959. (French)
- Cassiman, W.; and Enderele, J.: The Ballistocardiogram and Its Practical Value in Cases of Disease of the Coronary Arteries. *In:* Proc. 3rd World Congress of Cardiology, Brussels, Sept. 14-21, 1958. (Abstracts of Communications)
- CASTILLO, E. B. DEL; SCHARER, R. F.; GUARDO, A. H.; LAROTONDA, A.; and ZUCAL, C. A.: (Considerations Apropos of Various Cardiac Disorders in the Course of the Simmonds-Sheehan Syndrome) Presse Med., 71:806-807, 1963. (French)
- CATHCART, R. T.; FIELD, W. W.; and RICHARDS, D. W., Jr.; Comparison of Cardiac Output Determined by the Ballistocardiograph (Nickerson Apparatus) and by the Direct Fick Method. J. Clin. Invest., 32:5, 1953.

- CHESKY, K.; MOSER, M.; TAYMOB, R. C.; MASTER, A. M.; and PORDY, L.: (Clinical Evaluation of the Ballistocardiogram. II. Heart Disease—Hypertension, Angina Pectoris, and Myocardial Infarction.) Am. Heart J., 42:328, 1951.
- CHEVAT, H.; MERLEN, J. R.; and POULIN, P.: (The Flack Test and the Ballistocardiogram.) Bull. Soc. Med. Milit. Franc., 54:197, 1960. (French)
- CHEVAT, H.; MERLEN, J. F.; and BOUCHEAU, P.: La Ballistocardiographie Diag. Value. Rev. Corps De Sante Milit. (Paris) 11:87-95, 1955.
- CHIERICI, F.; MARTINELLI, M.; and LENZI, S.: (Ballistocardiographic and Electrocardiographic Data in Master's Effort Test in Patients with Neurodystonia.) Atti Soc. Ital. Cardiol. Supplemento Al Folia Cardiol. (Milano) Vol. 1:30, 1956.
- CHIERICI, F.; LENZI, S.; POPPI, A.; FACCI, M.; and CUSSINI, G.: (Evaluation of Normal Ballistocardiogram. IV. Ballistocardiographical Variations Caused by Respiration in Normal Subject.) Arch. Med. Intern. (Parma) 7(1):33, Jan.-Feb. 1955. (Italian)
- CHIERICI, F.; POPPI, S.; et al.: Studi di Semeiotica ballistocardiografica. Riv. Med. di Bologna, 1:1, 1955.
- CHLEBUS, H.: (On the Value of Cardiographic Studies in the Determination of Intra-arterial Pressure Deviations.) Pol. Arch. Med. Wewnetrznej, 33:77-83, 1963. (Polish)
- CHLEBUS, HENRYK: Value of Examination of Carotid Pulse by Means of Resonance Electrosphymographs in Relation to Intra-arterial Pressure Tracings. American Heart Journal, 64: 22, 1962.
- Chlebus, H.: Wczesny Ohres Miazdycy Tetnic w Obrazie Kardiograficznym. (Early Stage of Arterio-Sclerosis in Cardiograms.) Warsaw, 1959. (Monograph) (Polish) English translation by U.S. Joint Public. Res. Serv., Wash., D.C. for FAA, Wash., D.C.
- CIAMPALINI, L.; LOTI, P.; and PALAGI, L.: (Hemodynamic Study during the Prepubertal Age.) Rass. Fisiopat. Clin. Ter., 34:695-702, 1962. (Italian)
- CLOETENS, W.; DEMAY, D.; TUYNS, A.; DE MAERTELAERE, P.; HERBIET, J. E.; and DERNIER, J.: (Trial Classification of the Human Ballistocardiogram by Study of its Chronology Related to the Electrocardiogram.) Acta. Cardiol. (Brussels), 14:453, 1959. (French)
- CLOETENS, W.; DEMEY, C.; DERNIER, J.; MAERTELAERE, P. DE: and HERBLIET, J.: (Statistical Study of 3,500 Ballistographic Lines New Classification.) In: Proc. 3rd World Congress of Cardiology, Brussels, Sept. 14-21, 1958. (Abstracts of Communications)
- Clough, P. W.: Editorial: (The Effect of Tobacco on the Heart.) Ann. of Intern. Med., 45:319, Aug. 1956.
- Collicelli, A.; and Puddie, V.: Modifications in the Ballistocardiogram After Commissurotomy for Mitral Stenosis. Fol. Card. (Milan), 12:194, 1953.
- COLONNA, L.; MANGANELLI, G.; and SAPONARO, V.: Effects of Abdominal Compression on Renal Elimination of

- Water and Sodium and on Ballistocardiograms. Cuore e Circol. (Rome), 41:46, 1957. (Italian)
- COLONNA, L.; BINI, L., and RICCIARDI, G.: Valutazione Circolatoria dell' Atleta Allenato can Metods Balistocardiografico e Sfigmografico. (Circulatory Evaluation of the Trained Athlete by Ballistocardiography and Sphygmography.) Minerva Cardiol. (Turin), 5:502, Nov. 1957. (Italian)
- COLONNA, L.: Curve Balistocardiografiche nei disturbi della Conduzione Intraventricolare. Cuore Circol. (Rome), 39(5): 257, Oct. 1955.
- CONCINA, B.: (Ballistocardigraphy During Hypoxemia Induced in Normal and Cardiac Subjects.) Cuore e Circol. (Rome), 38:206, 1954. (Italian)
- CORBASCIO, A. N.; and West, J. W.: Effect of Selective Myocardial Stimulation or Depression Induced by Intra-coronary Administration of Drugs or by Obstruction of Major Vessels. Studies With the Dog Ultra-low Frequency Ballistocardiogram. Am. Heart J., 62:785, 1961.
- Corbascio, A. N.; and West, J. W.: Nicotine and Smoking on the Dog Ballistocardiograms, Ann. N.Y. Acad. Sci., 90:249, 1960.
- CORBASCIO, A. N.; and WEST, W.: (Actions of Nicotine on the ULF-BCG of the Dog.) In: Proc. BCG Res. Soc., Atlantic City, N.J., May 2, 1959. (Abstract)
- CORMIDONTOV, E. N.: (Comparison of Ballisto- and Electrocardiographic Data in Patients with Endemic Goiter and Thyrotoxicosis.) Probl. Endokrinol. Gormonoter., 6:48, 1960. (Russian)
- Cossio, P.; Berreta, J. A.; and Mosso, H. E.: (The Ballistocardiogram and the Blockage of the Circulation Through Ligature of Both Venae Cavae.) Am. Heart J., 49:72, 1955.
- Cossio, P.; Berreta, J. A.; and Fustinoni, O.; and Mosso, H. E.: El Balistocardiograma en el Sindrome de Lutembacher. (The Ballistocardiogram in Lutembacher Syndrome.) Medicine (Buenos Aires), 14:101, 1954. (Spanish) English Abstract in Circulation, 11:299, 1955
- Cossio, P.; Mosso, H. E.; Berreta, J. A.; Fustiononi, O.: (The Ballistocardiogram before and after Mitral Commisurotomy.) Prensa Med. Argent., 42:3881-84, 1955. (Spanish)
- Cossio, P.; Berreta, J. A.; Mosso, H. E.; and Fustinoni, O.: (Ballistocardiogram). Medicina (Buenos Aires), 15:368, 1955. (Spanish)
- Cossio, P.; Berreta, J. A.; Mosso, H. E.; and Fustinoni, O.: (The Ballistocardiogram in Mitral Stenosis.) Medicina (Buenos Aires), 15:368, 1955. (Spanish)
- Cossio, P.; Berreta, J. A.; Mosso, H. E.; and Fustinoni, O.: (Ballistocardiogram Recorded in Longitudinal Axis of Body of Different Levels.) Rev. Argent. Cardiol., 21:331, 1954. (Spanish)
- Cossio, P.; Berreta, J. A.; Mosso, H. E.; and Perianes, I.: (Ballistocardiogram in Experimental Myocardial Lesions.) Cardiologia, 24:372, 1954. (Spanish)

- Cossio, P.; Berreta, J. A.; Mosso, H. E.; and Perianes, I.: (Ballistocardiogram in Experimental Myocardial Lesions.) *In:* 4th Inter-Amer. Congress of Cardiol., Buenos Aires, Argentine, 1952. Brief Abstract in Am. Heart J., 46: 929, 1963.
- Cossio, P.; Berreta, J. A.; Mosso, H. E.; and Perianes, I.: (The Ballistocardiogram in Experimental Myocardial Lesions.) Rev. Argent. Cardiol., 20:85, 1953. (Spanish) English Translation by NASA, Wash., D.C., as NASA TT F-8535, Sept. 1963.
- Cossio, P.; and Mosso, H. E.: (Normal Ballistocardiogram) Rev. Argent. Cardiol. 19:53, 1952. (Spanish)
- Costada, N.: (Ballistocardiograms in Normal Pregnancy.) Med. Contemp. (Lisbon), 72: 529, 1954. (Portugese)
- COSTADA, N.; and BETTENCOURT, M. de: (Ballistocardiography in Normal Pregnancy.) In: 2nd World Congress of Cardiology Wash., D.C., Sept. 1954.
- COSTANZO, F.; DE LA PIERRE, M.; and PIETRA, R.: Il Ballistocardiogramma Senile. Minerva Med., (Turin), 50:1157.1959.
- COSTEAS, F.: Origine et Terminologie de la Ballistocardiographie. Arch. Mal. Coeur (Paris), 49:1066, 1956.
- COTTON, F. T.; and Lewis, T.: Observations Upon Fainting Attacks Due to Inhibitory Cardiac Impulses. Heart, VII: 23, 1918-20.
- COURNAND, A.; RILEY, R. L.; BRADLEY, S. E.; GREGERSON, M. T.; and RICHARDS, D. W.: Studies on the Circulation in Clinical Shock. Surgery, 13: 964, 1943.
- COURNAND, A.; RANGES, H. A.; and RILEY, R.: Comparison of the Results of the Normal Ballistocardiogram and a Direct Fick Method in Measuring Cardiac Output in Man. J. Clin. Invest., 21: 287, 1942.
- CRETIN, P.; PROBST, J. Y.; and DELACHAUF, A.: (New Agreement for Reading the Ballistogram.) Cardiology, (Basel), 25 (2-3): 180-5, 1954. (French)
- Cucci, C. E.; Masellis, F.; and De Simone, C.: Analisi Quantitativa del Balistocardiogramma Lingitudinale Fisiologico. Rass. Fisiopat., 25: 605, 1953.
- Cunningham, D. M.: (A Hydrostatic Air-Bearing Ballistocardiograph.) In: Proc. 4th European Symposium of Ballistocardiography, Lille, France, April 8-9, 1963.
- Cunningham, D. M.; and Smiley, P. C.: A Hydrostatic Air-Bearing Ballistocardiograph. J. Appl. Physiol., 16:755, 1961.
- CUNNINGHAM, D. M.; and Brown, G. W.: Basis for the Design of a Three-dimensional Ballistocardiograph. Proc. Soc. Exp. Stress Anal., 13:77, 1955.
- Cussini, G.; Lenzi, S.; Poppi, A.; Chierici, F.; and Facci, M.: (Evaluation of the Normal Ballistocardiogram. V. Ballistocardiographical Changes After Aortic Compression and After the Katzenstein Test.) Arch. Med. Intern. (Parma), 7(2):47, Mar.-Apr. 1955. (Italian)

D

DARBY, T. D.; WALTON, R. P.; and GAZES, P. C.: Effects of Drugs on Ballistocardiographic Recordings. Correlation with Other Cardiovascular Measurements in the Dog and in Man. Am. J. Cardiol., 3: 668, 1959.

- DARBY, T. D.; GAZES, P. C.; ALDINGER, E. E.; and TENNEY, J. M.: (Cardiovascular Dynamics During Angina Pectoris and Nitroglycerine Therapy.) Presented before Scientif. Sess. of the Pharmacol. Soc., Ann Arbor, Mich., Aug. 25-28, 1958. Abstract.
- DARBY, T. D.; GAZES, P. C.; ALDINGER, E. E.; and TENNEY, J. M.: Sympatho-adrenal Function During Nitrogly-cerine Treatment of Coronary Artery Disease. *In:* Proc. Ballistocardiograph Res. Soc., Atlantic City, N.J., May 3, 1958. (Abstract)
- DARBY, T. D.; WALTON, R. P.; and GAZES, P. C.: Acute Ballistocardiographic Changes Produced by Drugs Which Cause Distinctive Changes in Arterial Pressure and Heart Force. *In:* Proc. Ballistocardiograph Res. Soc., Atlantic City, N.J., May 4, 1957. (Abstract)
- DARBY, T. D.; GOLDBERG, L. I.; GAZES, P. C.; and ARBEIT,
  S. R.: Effect of Sympathomimetic Amines and Nitroglycerine on the Acceleration Ballistocardiogram of the
  Dog. J. Pharmacol. Exp. Therap., 119: 248, 1957.
- Darby, T. D.; and Walton, R. P.: Synchronous Recordings in the Dog to Determine Relations of Direct-body Ballistocardiogram With Other Cardiovascular Measurements. Federation Proc. 15; 415, 1956. (Abstract)
- DARBY, T. D.; GOLDBERG, L. I.; GAZES, P. C.; and ARBEIT, S. R.: Effects of Cardiovascular Drugs on the Acceleration Ballistocardiogram of the Dog. J. Pharmacol. & Exp. Therap., 113: 14, 1955.
- DARBY, T. D.; GOLDBERG, L. I.; GAZES, P. C.; and ARBEIT, S. R.: Methods of Obtaining Direct-body Displacement-Velocity-Acceleration Ballistocardiograms of the Dog. Proc. Soc. Exp. Biol., 86: 673, 1954.
- Davis, F. W., Jr.: The Role of the Ballistocardiograph in the Diagnosis and Management of Patients With Coronary Heart Disease. Stress Tests and the Cigarette Test. Am. J. of Cardiol., 3:103, 1959.
- Davis, F. W., Jr., M.D.: Some Newer Concepts in Medical Treatment of Atherosclerosis. Md. State Med. J., 8: 349, 1959.
- DAVIS, F. W., Jr., SCARBOROUGH, WM. R.; MASON, R. E.; SINGEWALD, M. L.; and BAKER, B. M., Jr.: Experimental Hormonal Therapy of Atherosclerosis: Preliminary Observations on the Effects of Two New Compounds. Am. J. Med. Sci., 235: 50, Jan., 1958.
- Davis, F. W., Jr., Scarborough, W. R.; Mason, R. E.; Singewald, M. L.; and Baker, B. M., Jr.: The Ballistocardiographic Cigarette Test: Further Observations. Am. Heart J., 51: 165, Feb., 1956.
- Davis, F. W., Jr.; Scarborough, W. R.; Mason, R. E.; and Singewald, M. L.: The Effects of Exercise and Smoking on the Electrocardiograms and Ballistocardiograms of Normal Subjects and Patients With Coronary Artery Disease. Am. Heart J., 46: 529, Oct., 1953.
- Davis, F. W., Jr.; Scarborough, W. R.; Mason, R. E.; Singewald, M. L.; and Baker, B. M., Jr.: The Ballistocardiogram in Mitral Stenosis. Circulation, 7:503, 1953.

- Davis, F. W., Jr.: The Current Status of Ballistocardiography. Annual Report and Scientific Session Papers of the Pa. Heart Assoc., October, 1953.
- DEAGUIAB, A. J.: See Aguiar, A. J. de
- DE BALSAC, H.: See Balsac, H. de
- Debacker, G.: (Contributions a l'Etude de l'Avenir Fonctionnel et Professionnel des Coronariens (Apport Balistocardiographique). These de Medicine, Lille, 1957. (French)
- DEBENEDETTI, V.: (Ballistocardiogram and the Limitations of its Practical Application.) Minerva Cardiol. (Turin), 2(40):176-88, 1954. (Italian)
- Debenedetti, V.; Ravera, M.: Ballistocardiographic Modifications After Administration of Nerve Blocking Agents. Folia Cardiol. (Milan), 13: 123, 1954.
- DE BETTENCOURT, J. M.: See Bettencourt, J. M., de
- DE CARRERA, R.: See Carrera, R. de
- DEC, L.: (Ballistocardiogram After Smoking and Nitroglycerine as a Diagnostic Test in Atherosclerosis of the Coronary Vessels.) Polskie Arch. Med. Wewnetrej, 30:923, 1960. (Polish)
- Degeroges, M. L.: (Ballistocardiography.) Semaine Hop. de Paris, 29: 2843, 1953. (French)
- Dektiar, G. la.: (Ballistocardiography and its Clinical Value.) Vopr. Patol. Seredechnos. Sistem. (Moscow), 4:3-10, 1955. (Russian)
- DELACHAUX, A.; PROBST, J. Y.; and CRETIN, P.: (Clinical Value of the Ballistogram.) (Cardiologia (Basel), 25(2-3):186-95,1954. (French)
- Delachaux, A.; Probst, J. Y.; and Cretin, P.: (Pathological Ballistocardiogram.) Cardiologia (Basel), 23: 148, 1953. (French)
- Delachaux, A.; Probst, J. Y., and Schelling, J. L.: Ballistocardiography; a Mechanical Function Test of the Myocardium. Praxis (Berne), 42:153, 1953. (French)
- DE LA MAZA, J. H.: See Maza, J. H. de la
- DE LA PIERRE, M.: See Pierre, M. de la
- DEL CASTILLO, E. B.: See CASTILLO, E. B. Del
- DE SIMONE, G.; Cucci, C.; and Masellis, F.: (Ballisto-cardiographic Study of Hemodynamic Ventricular Systole.) Arch. Fisiol. (Florence), 54:6-16, May 1954. (Italian)
- DE SIMEONI, G.: See Simeoni, G. de
- DE SOLDATI, L.: See Soldati, L. de
- DEMIDIUK, A. A.; and TAMBIEV, E. A.: (Reconstruction of the Electrocardiograph EKP-4m Into a Two-channel Apparatus.) Biul. Eksp. Biol. Med., 46:115, 1958. (Russian)
- Desruelles, J.; Merlen, J. F.; and Debacker, G.: Practical Value of the Ballistocardiogram in Myocardial Infarction. Am. J. Cardiol., 3:236, Feb. 1959.
- Desruelles, J.; Merlen, J. F.; and Debacker, G.: Practical Value of the Ballistocardiogram in Myocardial Infarct. Lille Med., 4:713, 1959. (French)
- DETSKI, IUL.: (On Ballistocardiographic Changes in Pulmonary Emphysema.) Klinich. Med. (Moscow), 39:111,1961. (Russian)

- Deuchar, D. C.: (Some Further Observations on the Ballistocardiogram in Aortic Valve Disease.) In: Proc. Third European Symposium for Ballistocardiography, Brussels, Belgium, April 16-17, 1962. p. 225.
- Deuchar, D. C.; Talbot, S. A.; and Scarborough, W. R.: Some Observation on the Relation of the High-frequency Bed Ballistocardiogram to that Obtained From an Aperiodic Bed. Circulation, 11: 228, 1955.
- Diaz, L. C.: Balistocardiografia. Rev. Espan. Cardiol., 6:162, 1962.
- DIBENEDETTO, DELL'AQUILA, M.: (Ballistocardiogram in Myocardiopathy Caused by Liver Disease.) Progr. Med., 11:582, 1955. (Italian)
- DIXON, J. A.; SCOTT, W. J. M.; and EPSTEIN, M. A.: Intraarterial Histamine in the Treatment of Occlusive Peripheral Vascular Disease. Circulation, 5:661, 1952.
- Dock, W.: Ballistocardiographic Patterns and Nicotine. Arch. Internal Med. 112:467, 1963.
- DOCK, W.: Transmission of Ballistocardiographic Forces to Platforms Mounted on Springs. Am. J. Med. Sci., 245: 449-455, 1963.
- DOCK, W.: Effects of Respiration on Transmission of Ballistocardiographic Forces from the Heart to the Recording System. Am. Heart J., 58:102, 1959.
- DOCK, W.: The Three-plane Ballistocardiogram in Heart Failure. Am. J. Cardiol. 3:384, March 1959.
- DOCK, W. and GRANDELL, F.: The Significance of Large Lateral and Small Head-foot Waves in the Ballistocardiogram of Ectopic Beats. Am. Heart J., 53:641, May 1957.
- DOCK, W.; GRANDELL, F.; and TAUBMAN, F.: (The Physiologic Third Heart Sound. Its Mechanism and Relation to Portodiastolic Gallop.) Am. Heart J., 50(3): 499, Sept. 1955.
- DOCK, W.: The Value of Lateral Ballistocardiograms in Differentiating Aortic Tortuosity from Myocardial Dysfunction. Trans, Assoc. Am. Phys., 67: 185, 1954. Also in: Am. J. Med. Sc., 228: 125, 1954.
- DOCK, W.: (The Use of Instrumental Aids in Managing Coronary Diseases.) Med. Arts and Sci. (Washington), 7(4):115-8, 1953.
- DOCK, W., MANDELBAUM, H.; and MANDELBAUM, R. A.: Ballistocardiography. The Application of the Direct Ballistocardiograph to Clinical Medicine. St. Louis, C. V. Mosby, 1953.
- DOCK, W.; MANDELBAUM, H.; and MANDELBAUM, R. A.: Ballistocardiography in Medical Practice. J. Am. Med. Assoc. 146: 1284, 1951.
- Dock, W.: Recording the Motions of the Heart and Blood for Clinical Purposes. Trans. Assoc. Am. Phys., 62:148, 1949.
- DOCK, W., and TAUBMAN, F.: Some Technics for Recording the Ballistocardiogram Directly from the Body. Am. J. Med., 7:751, 1949.
- DOHERTY, J. E.: Ballistocardiography; Historical Review and Clinical Observations. Am. Practitioner and Dig. Treat., 3:464, 1952.

- Dolan, M.: Ballistocardiographic Changes During Rheumatic Fever. Am. J. Cardiol., 3:533, April, 1959.
- Doliopoulos, T.; and Bangou, H.: The Ballistocardiogram in Athletes. Cardiologia (Basel), 23:300, 1953.
- Doll, E.: (The Upper Turning-Point in the Chestwall Ballistocardiogram of the Normal Newborn Infant; Its Change in the First Months of Life and Its Relation to the Vectorcardiogram. Z. Kreislaufforsch. (Darmstadt), 45:210, 1956. (German)
- Donaldson, R. R.; Cunningham, D. M.; Griswald, H. E.; and Reaume, R. B.: (Design of a Clinical Ultra-low Frequency Ballistocardiograph.) Clin. Res., 7:98, 1959. Also in Circulation. 19:903, 1959 (Abstract)
- Donoso, E.; Pordy, L.; Chesky, K.; and Master, A. M.: (The Ballistocardiogram in Diabetes Mellitus.) N.Y. State J. Med., 54: 1170, 1954.
- Donoso, E.; Pordy, L.; Yuceoglu, Y. Z.; Minor, J. B.; Chesky K.; and Amram, S. S.: (The Ballistocardiogram in Congenital Heart Disease.) Am. Heart J., (St. Louis), 52(3):352, 1956.
- DONZELOT, E.; MOLOVANOVICH, J. B.; HEIM DE BALSAC, R.; DOLIOPOULOS, R.; and RAGER, R.: (Comparative Studies of 100 Normal Ballistocardiograms Collected by Piezo-Electric or Photo-electric System.) Arch. Maladies Coeur. (Paris), 46:746, 1953. (French)
- DORMIDONTOV, E. N.: (Dynamic Clinico-ballistocardiographic Studies in Thyrotoxicosis and Endemic Hyperthyroid Goiter in Connection with Surgical and Conservative Therapy.) Terapert. Arkh., 34:60, 1962. (Russian)
- DORMIDONTOV, E. N.: (Comparison of Ballisto- and Electrocardiographic Data in Patients with Endemic Goiter and Thyrotoxicosis.) Probol. Endokrinol. Gormonoterap., 6:48, 1960. (Russian)
- Douglas, C. G.; Haldane, J. S. Henderson, Y.; and Schneider, E. C.: Physiological Observations Made on Pike's Peak, Colorado, with Special Reference to Adaptation to Low Barometric Pressures. Trans. Roy. Soc. (London), Ser. B., 302: 185, 1913.
- Dow, P.; and Hamilton, W. F.: An Analysis, by Hydraulic Models of the Factors Operating to Produce the Typical Ballistocardiogram. Am. J. Physiol., 133:263 (Proc. Am. Physiol. Soc., 53rd, Ann. Meeting).
- Dubkalec, J.: (Ballistocardiogram in Acromegaly.) Polski Tygod. Lekar., 15: 1699, 1960. (Polish)
- Durkalec, J.: (Ballistocardiogram in Arteriosclerosis.)
  Poznan Towarz, Przyjaciol. Nauk Wydzial. Lekar., 22:
  73, 1961. (Polish)
- Durkalec, J.: (Ballistocardiogram in Atherosclerosis.)
  Pol. Arch. Med. Wewnetrznej, 30:1960. (Polish)

Ε

EBERT, H.: Das Ballistokardiogramm des Alteren Menschen. (The Ballistocardiogram of Older People) Z. Kreislaufforsch, 46:598, August 1957. (German)

- EBERT, H.: (Relations Between Ballistocardiogram, Pulse-wave Velocity, Stroke Volume and Elastic Peripheral Total Resistance.) Z. Kreislaufforsch. 43:783-91, 1954. (German).
- EBERT, H.: (Ballistocardiography as a Method of Clinical Examination.) Deut. Gesundheitsw. (Berlin), 8:761, 1953. (German)
- EDDLEMAN, E. E., Jr., and Frederick, W. F.: The Genesis of the Ballistocardiogram. Experimental Observations. In: Proc. Ballistocardiograph Res. Soc., Cincinnati, Ohio. Oct. 28, 1956. (Abstract)
- EDDLEMAN, E. E., Jr.: Kinetocardiographic and Ballistocardiographic Findings in Aortic Insufficiency. Am. J. of Med., 946: 20 June, 1956. (Abstract)
- EDDLEMAN, E. E. Jr.; YOE, ROBERT H.; TUCKER, Wm.; KNOWLES, JOHN L.; and WILLIS, KATHERINE: The Dynamics of Ventricular Contraction and Relaxation in Patients with Mitral Stenosis as Studied by the Kinetocardiogram and Ballistocardiogram. Circulation, III: 774. May 1955.
- EDDLEMAN, E. E., Jr.; Kinetocardiography and Ballistocardiography in Mitral Valve Disease.: Clin. Res. Proc., 3:1, 1955.
- EDDLEMAN, E. E., Jr. and WILLIS, KATHRYN: The Kine-tocardiogram. III. The Distribution of Forces Over the Anterior Chest. Circulation. 8: 569. 1953.
- EDDLEMAN, E. E., Jr.; WILLIS, K.; CHRISTIANSON, L.; PIERCE, J. R.; and WALKER, R. P.: The Kinetocardiogram. II. The Normal Configuration and Amplitude. Circulation 8:370, 1953.
- EDDLEMAN, E. E., Jr.; WILLIS, KATHRYN; REEVES, T. J.; and HARRISON, T. R.: The Kinetocardiogram. I. Method of Recording Precordial Movements. Circulation, 8:2, 1953.
- Edson, J. N.; Flamm, G. H.; Dickes, R.; Tobin, M.; and Loeb, L.: Thoracic Ballistocardiography. Am. Herat J., 48: 897, 1954.
- EDSON, J. N.; DICKES, ROBERT; FLAMM, GERALD H.; and TOBIN, MICHAEL: Higher Frequency Phenomena in the Normal Ballistocardiogram. Circulation Res., 7:405-9, 1953.
- EGER, W.: (Ballistocardiographic Studies Before and After Delivery. [With a Contribution to Circulatory Changes Due to Blood Loss].) Zbl. Gynaek., 85:716-720, 1963. (German)
- EGER, W.: Kreislaufwirkungen der Epidural-anaesthesie. In: Proc. 2nd European Symposium for Ballistocardiography, Bonn, Germany, March 27–28, 1961, p. 210.
- EGER, W.; and HUEGIN, W.: Ballistocardiographic Studies in Anesthesia with Special Reference to the Problem of Hypotension Under Halothane. Anaesthetist., 10:44, 1961.
- EGER, W.: and KLENSCH, H.: (Qualitative and Quantitative Ballistographic Studies of Model Circulation.)
  Pflüger's Arch. Ges. Physiol. (Berlin), 262:443, 1956.
  (German)

- Eichna, L. W.; Taube, H., and Degraff, A. C.: Serial Determinations of Cardiac Output (Ballistocardiogram) and Electrocardiogram in Normal Man After the Intravenous Administration of Purified Cardiac Glycosides. J. Pharmacol. Exp. Therap., 78: 22, 1943.
- EIKENBERRY, D.; HULTGREN, H.: The Ballistocardiogram in Congenital Heart Disease. Clin. Res. Proc., Vol. II, No. 1, Feb. 1955.
- ELIAKIM, M.; IZAK, G.; and BRAUN, K.: (The Effect of Chlorpromazine on the Ballistocardiogram and the Electrocardiogram in Man.) Cardiologia (Basel), 32:177, 1958.
- ELKIN, D. C.; and COOPER, F. W., Jr.: Surgical Treatment of Insidious Thrombosis of the Aorta. Ann. Surg., 130:417.1949.
- ELKIN, D. C.; and WARREN, J. V.: Arteriovenous Fistulas: Their Effect on Circulation. J. Am. Med. Assoc., 134: 1524, 1947.
- ELLIOTT, R. V.: Ballistocardiography at Simulated Altitudes. J. Aviation Med., 26: 137-45, 1955.
- ELLIOTT, R. V.; PACKARD, R. G.; and KYRAZIS, D. T.: Acceleration Ballistocardiography. Design, Construction and Application of a New Instrument. Circulation, 9:281, 1954.
- ELSBACH, H.: Klinische Onderzoekingen met de Laagfrequente Ballistocardiograaf Volgens Burger. (Clinical Investigations with the Low-frequency Ballistocardiograph According to the Method of Burger.) Thesis, Univ. of Leiden (The Netherlands), 1954. English Translation by R. G. Freeman; Re-edited by Wm. R. Scarborough, 1956. (English Summary)
- ELZAS, B.: A Method for the Study of the Form of the High Frequency Undamped Ballistocardiogram. Am. Heart J., 51: 829, 1956.
- ENDERLE, J.; CASSIMAN, W.; VAN HEERSWYNGHELS; and SEGERS, M.: The Ballistocardiogram and the Electro-kymogram in Heart Block. *In:* 2nd World Congress of Cardiology, Wash., D.C., Sept. 1954.
- ENGELBERG, H.: Correlation Between Serum Lipids and Resting and Exercise Ballistocardiogram. Am. J. Cardiol., 3: 242, Feb., 1959.
- ENGELBERG, H.: Heparin Therapy of Severe Coronary Atherosclerosis, With Observations of its Effect on Angina Pectoris, the 2-Step Electrocardiogram and Ballistocardiogram. Am. J. Med. Sci., 224:487, 1952.
- Erneszt, J.: Prognostic Value of Ballistocardiography of Pregnant Women with Heart Diseases. Magy. Noorvosok Lapja (Budapest), 20:328, 959. (Hungarian)
- Ernsthausen, W.; Reissman, K.; and von Wittern, W. W., Die Messung von Stromungsvorgangen in den Herznahen Gefassen. Ueber die Ruckwirkung der Blutbewegung auf den Korper. Pflüger's Arch. (Berlin), 251:56, 1949. (German)
- ERNSTHAUSEN, W.; von WITTERN, W.: and REISSMANN, K.: The Torsion Ballistocardiograph. USAF Air Materiel Command, Report No. MCRED -696-116A, 1948.

- Facci, M.; Mussini, M.: (Physiological Ballistocardiogram; Chronological Relation Between the Ballistocardiogram, Phonogram, Apexagram, Phlelogram, Distal and Proximal Arterial Pulse. Omnia Med. (Pisa), 32(3-4): 223-47, 1954. (Italian)
- FACCI, M.; POPPI, A.; LENZI, S.; CUSSINI, G.; and CHIEBICI, F.: (Study of Ballistocardiograms Recorded with Various Rotations of the Body Around the Recording Table.) Arch. Med. Intern. (Parma), 6:27, 1954. (Italian)
- FAGIN, I. D.; and McIntyre, K. E.: Experiences with Ballistocardiography. Ann. Internal Med., 42:995, May 1955.
- FARULLA, A.; RUSSO-CAIA, S.; and NARO, G.: (Peculiar Behavior of the Ballistocardiogram During Inhalation of Amyl Nitrite; Observations in Normal Subjects.) Boll. Soc. Ital. Biol. Sper. (Naples), 35:332, 1959. (Italian)
- FARULLA, A.: (Review of Clinical and Experimental Ballistocardiographic Studies.) Boll. Soc. Ital. Biol. Sper. (Naples), 35: 339, 1959. (Italian)
- FARULLA, A.; and RUSSO-CAIA, S.: (The Ballistocardiogram of the Isolated Heart.) Cardiologia (Berne), 30:367,1957.
- FARULLA, A.; and GUIDOTTI, P. L.: (Behavior of the Ballistocardiogram after Administration of Nicotinic Acid in Normal Subjects.) Atti Soc. Ital. Cardiol. Suppl. Fol. Cardiol. (Rome), 1:243, 1956. (Italian)
- FARULLA, A.; and MARTINI, G.: (Effects of Exclusion of the Legs on the Ballistocardiogram.) Atti. Soc. Ital. Cardiol: 1:232, 1956. (Italian)
- FARULLA, A.; STRANO, A.; and CASTAGNETTA, E.: (The Ballistocardiogram in Experimental Transitory Stenosis of the Pulmonary Artery Induced in Man by Condorelli's Catheter.) Atti. Soc. Ital. Cardiol. (Suppl. Fol. Cardiol.), 1:229, 1956. (Italian)
- FARULLA, A.; GRANDI, G.; and NARO, G.: (Ballistocardiographic Research with Adrenalin, Noradrenalin and Veritol in Man and Dogs.) Atti. Soc. Ital. Cardiol. (Suppl. Fol. Cardiol.), 1:247, 1956. (Italian)
- Farulla, A.; and Russo-Caia, S.: (Components of the Cardiac Contraction on the Ballistocardiogram; Experimental Research on the Isolated Heart of Amphibia.) Atti. Soc. Ital. Cardiol., 1:224, 1956. (Italian)
- FARULLA, A.; and Busnengo, E.: Il Balistocardiogramma Negli Stati Ipertensivi ed Ipotensivi del Grande Circolo. Presented at April 24, 1955 Meeting of Boll. Soc. Ital. de Cardiol.
- FARULLA, A.; and STRANO, A.: (Ballistocardiogram in Atrioventricular Block.) Atti. Soc. Ital. Cardiol., 16: 296, 1954. (Italian)
- FARULIA, A.; STRANO, A.; and FILOCAMO, G.: (Ballisto-cardiographic Study in Pulsus Alternans; Case.) Atti. Soc. Ital. Cardiol. 16:299, 1954. (Italian)

- Fedoseev, A. N.: (Changes in Certain Hemodynamic Indices of Dogs in Experimental Cholesterol Atherosclerosis.) Bull. Exp. Biol. Med., 49:457, 1960. English translation of article in Biul. Eskp. Biol. Med., 49:41, 1960. (Russian)
- Fedoseev, A. N.; (The Method of Ballistocardiography in Chronic Experiments on Dogs. Bull. Exp. Biol. Med., 46:1518, 1958. English translation of article in Biul. Eskp. Biol. Med., 46:101, 1957. (Russian)
- Fedoseyev, A. N.: See Fedoseev, A. N.
- FEITELBERG, S.; PORDY, L.; and CHESKY, K.: Performance Testing and Calibrations of the Ballistocardiographic Apparatus. J. Mt. Sinai Hosp. (New York), 25:160, Mar., Apr., 1958.
- Felderhoff, B.: Ballistokardiographische Untersuchungen zur Wirkung des Fett-Eiweiss- und Kohlenhydratstoffwechsels. In: Proc. 2d European Symposium for Ballistocardiography, Bonn, Germany, March 27–28, 1961, p. 235.
- Felisov, N. S.: (A Piezomagnetic Recorder for Registration of Ballistocardiograms.) Klinich. Med. (Moscow), 38:143,1960. (Russian)
- Feraboli, M.; Fiorato, S.; and Grassi, G.: (Ballisto-cardiography and Pregnancy.) Minerva Ginecol. (Turin), 7:123-4, 1955. (Italian)
- FIANDRA O; CERVINO, J. M.; NAVARRO, A.; ZALDUA DE DEL-FINO, E.; and MUSSIOFOURNIER, J. C.: (The Rheocardiogram and Ballistocardiogram in Myxedema.) Bull. Mem. Soc. Med. Hop. Paris, 71(1-2):12-9, 1955. (French)
- FIDLER, A.; BHARGAVA, A. N.; and PARENT, P.: Clinical Value of Ballistocardiography. Am. Heart J., 55: 881, June 1958.
- FISHER, D. C.; and Shmock, C. L.: Quantitative Interpretation of Ballistocardiograms; New Approach. U.S. Armed Forces Med. J., 7: 1755, 1956.
- FLEISCH, A. O.: Ballistocardiographie. Schweiz. Med. Wochenschr. (Basel), 85:621-7, 1955.
- FLEMING, T. C.; HABIF, D. V.; and NICKERSON, J. L.: Postoperative Changes in Cardiac Output. Am. Heart J., 42:334,1951.
- FLETCHER, A. G., Jr.; HARDY, J. D.; RIEGEL, C.; and Koor, C. E.: Gelatin as Plasma Substitute; the Effect on Intravenous Infusion of Gelatin on Cardiac Output and Other Aspects of the Circulation of Normal Persons, of Chronically Ill Patients, and of Normal Volunteers Subjected to Large Hemorrhage. J. Clin. Invest. 24:405, 1945.
- Folan, M. E.: Design for Electromagnetic Ballistocardiograph. Irish J. Med. Sci., 6: 426, 1952.
- Foley, R. E.: Clinical Use of the Ballistocardiograph: Preliminary Report. Lahey Clin. Bull., 8:109, 1953.
- FORNOVA, F.; and PEROSINO, R.: (Relation Between Ballistocardiogram and Israel-Rendu Circulation Study.) Atti. Soc. Ital. Cardiol. 16: 286, 1954. (Italian)
- FORNOVA, F.; and PEROSINO, R.: (Investigation of the Functional Activity of the Heart.) Minerva Med. (Turin), 45(61-62): 286-7, 1954.

- FORTIN, P.: Ballistocardiography. Bull. Med., 67:565, 1953.
- Fox, S. M., III; WARBASSE, J. R.; CRAWFORD, R. B.; GREEN-FIELD, J.; and Scarborough, W. R.: (Studies in Instantaneous Ascending Aortic Blood Velocity in Intact Man Relative to the Acceleration Ballistocardiogram.) In: Proc. Ballistocardiograph Res. Soc., Atlantic City, N.J., April 29, 1961. Abstract in Am. J. Cardiol., 8:302, 1961.
- Fox, T. T.: Further Remarks on the Ballistocardiogram in Chest Disease. Sea View Hospital Bull. (New York), 15(4): 190, July 1955.
- Fox, T. T.; REGAN, F. D.; and BERGER, H.: The Ballisto-cardiogram in the Presence of Pulmonary Disease. Disease of the Chest (Chicago), 27(1):134-46, 1955.
- DE FRANCISCIS, V.: (Ballistocardiography.) Arch. Tisiol., (Naples), 8: 153, 1953.
- Franco, A.: (Effects of Heparin in Atherosclerosis, Clinical and Experimental Study. Med. Contemp. (Lisbon), 2(11):535-51, 1954. (Portuguese)
- Franco, S. C.: Clinical Ballistocardiography Value and Limitations of Portable Ballistocardiograph in Detection of Heart Disease. Indus. Med. and Surg., 21:197, 1952.
- Franco, S. C.; and Gerl, A. J.: The Value and Limitations of the Portable Ballistocardiograph. N.Y. State J. of Med., 55: 1455, 1955.
- Francois, J.: Le Balistocardiogramme dans la Stenose Mitrale Pure. Acta Cardiol. (Brussels), 13:503, 1958.
- Francois, J.: (The Photo-electric Ballistocardiogram: Study of 192 Normal and Pathological Tracings.) Bruxelles Med., 34:2407, 1954. (French)
- Feancois, J.: (Ballistocardiography and Current Limitations of its Use. Bruxelles Med., 33:178, 1953. (French)
- FRANKEL, A. L.: (The Clinical Value of Ballistocardiography.) In: 4th Inter-American Congress of Cardiology, Buenos Aires, Argentina, 1952.
- Frankee, A. L.; and Rothermich, N. O.: Clinical Experiences in Ballistocardiography. Ann. Internal Med., 36: 1385, 1952.
- Franzblau, S. A.; Vawter, G. F.; Pestel, C. V.; and Marbarger, J. P.: Effects of Altitude Stress on the Human Circulatory System. Am. J. Med., 12:603, May 1952.
- Franzblau, S. A.; Best, W. R.; Marbarger, J. P.; and Gullemin, V., Jr.: Three Dimensional Vector Ballistocardiography. J. Lab. & Clin. Med., 36:824, 1950. (Abstract)
- FREDERICK, W. H.; and EDDLEMAN, E. E.: A Simple Bed Suspension for Ultra-low Frequency Ballistocardiography on Dogs. J. Appl. Physiol., 12: 347, 1958.
- FREDERICK, W. H.; EDDLEMAN. E. E., Jr.: Genesis of the Force Ballistocardiogram of the Dog. J. Appl. Physiol., 13:109, 1958.
- FREDERICK, W. H.; THOMAS, H. D.; KNOWLES, J. L.; TUCKER, W. T.; and EDDLEMAN, E. E., Jr.: The Ballistocardiogram of the Normal Dog. Am. Heart J., 50: 416, 1955.

- FULTON, R. L.; ROTHERMICH, N. C.; and BERGEN, W.: The Usefulness and Reliability of the Dock Ballistocardiograph in Clinical Medicine. Ann. Internal Med., 55: 258, 1961.
- Furkalo, N. K.: (On the Evaluation of a Method of Direct Ballistocardiography in Patients with Atherosclerotic Lesions of the Cardiovascular System.) Terapevt. Arkh. 32: 56, 1960. (Russian)
- Fustinoni, O.; Mosso, H. E.; and Berreta, J. A.: (The Ballistocardiogram in Old Age.) Prensa Med. Argent. (Buenos Aires), 42(40): 3071, Oct. 7, 1955. (Spanish)

#### G

- GABOR, G.: Dynamic of the Cardiac Cycle in Normal Adult and in Circulatory Failure. *In*: Proc. of 3rd World Congress of Cardiology, Brussels, Sept. 14-21, 1958. (Abstracts of Communications)
- GABOR, G.; and FORGACS, L.: (Mechanical Events of the Cardiac Cycle in the Normal Heart as Studied by the Ballistocardiogram.) Acta Med. Acad. Sci. Hung., 14: 335, 1959.
- GALDSTON, M.; and STEEL, J. M.: Critique of Area and Height Formula for Estimation of Cardiac Output From the Ballistocardiogram. J. Appl. Physiol., 3:229, 1950.
- Gallico, E.; Gioletta, G.; Pagnoni, A.; Rock, T.: La Ballistocardiographie dans de Compression Mediastinale. Presse Med. (Paris), 62(86):1828-31, 1954. (French)
- GAMBLE, W. J.: A New Ballistocardiographic Instrument for the Newborn. Experience with 50 Infants Under the Age of 5 Days. *In:* Proc. Ballistocardiograph Res. Soc., Atlantic City, N.J., May 2, 1959. (Abstract)
- Gamble, W. J.: A Simple Mechanical Calibrator for the Ultra-low Frequency Ballistocardiographic Bed. Am. J. Med. Sci., Vol. 234, 1957.
- Garello, L.; and Franco, G.: Effetto dell Espirazione
  Forzata sul Ballistocardiogramma dei Soggetti Normali.
  (Effect of Forced Expiration on Ballistocardiograms of Normal Subjects). Minerva Cardioangiol., 6:35, 1958.
  (Italian)
- GARELLO, L.; and BANDIERA, G.: (Behavior of the Ballistocardiogram in the Wolff-Parkinson-White Syndrome; Study of 13 Cases.) Folia Cardiol. (Milan), 16:183, 1957. (Italian)
- GARELLO, L.; and GATTO, E.; Effetti del Carico sul Balistocardiogramma Diretto nei Soggetti Normali. Arch. Maragliano, 13:97, 1957.
- GARELLO, L.; and GATTO, E.: Effetto del Carico Ponderale sul Beg. Diretto in Soggettin Affetti de Coronaro-Miocardio-Sclerosi. Arch. Maragliano Patol. Clin. (Genoa), 13:105, 1957.
- GARELLO, L.; and ALCOZER, G.: (Ballistocardiographic Behavior in Hyperthyroidism.) Arch. Maragliano Patol. Clin. (Genoa) 12(3):547, June 1956. (Italian)
- GARELLO, L.: (Method of Standardization of Ballistocardiograms Recorded with Fixed-table Apparatus.) Arch. Maragliano Patol. Clin. (Genoa), 11(3):847, Dec. 1955. (Italian)

- GARELLO, L.; and BANDIERA, G.: (Ballistocardiograms in Normal Age Subjects over 65.) Arch. Marágliano Patol. Clin. (Genoa), 9:1615-22, 1954. (Italian)
- Garello, L.; and Bandiera, G.: (Ballistocardiographical Studies. II. Respiratory Changes in Normal Ballistocardiography and Their Significant.) Arch. Maragliano Patal. Clin. (Genoa), 9(5): 1293-302, 1954.
- GARRETT, J.; OSSWALD, W.; and Moreira, M. G.: Mechanism of Cardiovascular Actions of Heptanolamines. Brit. J. Pharmacal. & Chemotherap. 18:49, 1962.
- Garzon, F. L.: Ballistocardiografia. Rev. Fac. Cienc. Med. Univ. Assn. J., 76: 778, 1957.
- GAZES, P. C.; GOLDBERG, L. I.; DARBY, T. D.; and ARBEIT, S. R.: Contrasting Heart Forces; Effects of 1-Norepinephrine and Neo-Synephrine Determined by Correlated Ballistocardiographic Tracings and Direct Force Measurements in Dogs and by Acceleration Ballistocardiographic Recordings in Patients. *In:* Second World Congress of Cardiology, Sept. 1954, Part II, p. 239.
- GAZES, P. C.; GOLDBERG, L. I.; DARBY, T. D.; and ARBEIT, S. R.: Basis for the Use of Sympathomimetic Animes in Shock Accompanying Myocardial Infarction: Ballistocardiographic Evidence. *In:* Program, Scientific Meetings, Am. Heart Assoc., April 1954 (Abstract)
- Gebinski, K.; Proba, B.; and Bara, B.: (Analysis of the Time Connections in Ballistocardiography.) Polskie Arch. Med. Wewnetrznej (Warsaw), 25(2): 271, 1955. (Polish)
- GEFTER, A. I.; MATUSOVA, A. P.; and BELOUSOV, S. S.: K Voprosu o Diagnosticheskoi, Prognosticheskoi Tsennosti Ballistokardiografii pri Koronarnoi Nedostochnosti. (Diagnostic and Prognostic Values of Ballistocardiography in Coronary Insufficiency.) Terapevt. Arkh., 29:26, 1957. (Russian)
- GEFTER, A. I.; MATUSOVA, A. P.; BELOUSOV, S. S.; and V'LUKHIN, L. T.: K Tekhnike Priamoi Ballistokardiografii; Opisanie Prostoi Model Elektromagnitnoga Ballistokardiographic Heskogo Datchika. (Technic of Direct Ballistocardiography; Description of a Model Electromagnetic Ballistocardiographic Data Unit.) Terapevt. Arkh (Moscow), 30:81, 1958. (Russian)
- GELATO, D. C.: (Ballistocardiogram in Diagnosis of Coronary Disease.) Minerva Med. (Turin), 47(26):955, March 31, 1956. (Italian)
- GENTILE, C.: Simple Piezographic Method of Obtaining Direct Ballistocardiograms. Rev. Argent. Cardiol., 19:17, 1952.
- GHILLIB, J.; TOBIN, M.; WEISS, S. S.; McGINN, J. T.; SAVINO, D.; and EDSON, N.: The Effect of Sedation on the Normal Ballistocardiogram of Fatigue. Am. Heart J., 54:894, 1958.
- GHYCZY, K.; and KERKOVITS, G.: (A Simple Method of Ballistocardiography.) Orvosi Hetilap (Budapest), 96:217, 1955. (Hungarian)
- GIBINSKI, K.; PROBA, B.; and BARA, B.: Analysis of Time Relations of the Ballistocardiogram. Helv. Med. Acta (Basel), 23(2): 185, May 1956.

- Gigli, G.; and Del Bono: (Electrocardiographical, Phonocardiographical and Ballistocardiographical Pictures in Hyperthyroidism.) Progr. Med. (Naples), 11:197, 1955. (Italian)
- GISMATULIN, R. I.: (Hemodynamic Principle of the Genesis of Low Frequency Ballistocardiogram.) Cor. Vasa, 4:62, 1962. (Russian)
- GISMATULIN, R. I.: (Mutual Displacement Between the Body of the Patient and the Apparatus During Ballistocardiography.) Biophysics, 6:57, 1961. English Translation of article in Biofizika, 6:213, 1961.
- GISMATULIN, R. I.: (Physical Principles of Ballistocardiography in Quantitative Evaluation of Circulatory Functional State.) Fiziol. Zh. SSSR, 45:311, 1959. (Russian)
- GIUSEPPE, F., DI: (The Ballistocardiogram in Acquired Valvular Defects) Acta Cardiol., 8:22, 1953. (Italian) Abstract in English in Circulation, 3:785, 1953.
- GIUSEPPE, F., pi: (Ballistocardiogram in Coronary Disease) Folia Cardiol., 11: 499, 1952. (Italian)
- GIUSEPPE, F., DI: (Ballistocardiography; New Method of Cardiologic Study) Minerva Med., 1:294, 1952. (Italian)
- GIUSEPPE, F., DI: (Ballistocardiography) Acad. Med. (Turin), 67: 405, 1952. (Italian)
- GOETT, U.; and KLENSCH, H.: Circulatory Research Under the Conditions of Anesthesia and Artificial Hypotension. Anaesthetist, 10: 72, 1961.
- GOETTLICHER, O.: (Ballistocardiography.) Wien Z. Inn. Med., 41: 367, 1960. (German)
- Goldberg, B.; Zion, M. M.; Gear, J. H.; and Whidborne, J.: Cardiac Output as Measured by Ballistocardiograph and by Starr Formula in Hypertensive Patients. S. African J. Clin. Sci., 5: 244, 1954.
- Goldberg, L. I.; Darby, T. D.; and Gazes, P. C.: Ballistocardiography as a Method for Drug Evaluation. J. Pharmac. Exp. Therap., Jan. 1954. (Abstract)
- GOLDENBERG, V.; PANTZER, M.; and TEITEI, T.: Contributii La Tehnica Balistocardiografiel. (Notes on Ballistocardiographic Technic.) Med. Int. Bucur., 9:1587, Oct. 1957.
- GOMAR GUARNER, F.: (Ballistocardiographic Modifications Caused by Pulmonary Resection in Tuberculosis.) Hispalis Med. (Seville), 13 (139): 13-24, Jan. 1956. (Spanish)
- GOMAR GUARNER, F.: (Ballistocardiographic Modifications Caused by Resection in Pulmonary Tuberculosis.) Hispalis Medi. (Serville), 13(140): 65-75, Feb. 1956.
- GOMIRATO SANDRUCCI, M.; and BONO, G.: Il Balistocardiogrammo nell'eto infantile; Problemi di Tecnica e Valori Normali. (The Ballistocardiogram in Childhood; Technical Problems and Normal Measurements.) Minerva Pedial. 10: 617, 1958. (Italian)
- GOMIRATO SANDRUCCI, M.; and Bono, G.: La Balistocardiograno nelle Cardiopatie Congenite. (Ballistocardiography in Congenital HT Diseases.) Minerva Pediat., 10:665, 1958. (Italian)

- GONCHAROVA, L. N.; VEL'TMAN, L. A.; and PANFILOV, IUA.: (Synchronized Electro-, Phono- and Ballistocardiographic Registration with the Aid of an Industrial Electromagnetic Oscillograph MPO-2.) Terapevt. Arkh., 33:87, 1961. (Russian)
- Gonzalez Sabathie, L.; Robiolo, O. A.; and Leone, L. E.: (Ballistocardiography in the Normal Child). *In:* 4th Inter-American Congress of Cardiology, Buenos Aires, Argentina, 1952.
- Gonzalez Sabathie, L.; Robiolo, O. A., and Leone, L. E.: Ballistocardiography in Pregnancy. *In:* 4th Inter-American Congress of Cardiology, Buenos Aires, Argentina, 1952.
- Gonzalez Sabathie, L.; Robiolo, O. A.; and Leone, L. E.: A New Model of Ballistocardiograph and its Advantages in Clinical Use. Rosario, Argentina. *In:* 4th Inter-American Congress of Cardiology, Buenos Aires, Argentina. 1952.
- Gonzalez Sabathie, L.; Robiolo, O. A.; and Leone, L. E.: The Normal and Pathological Ballistocardiogram in the Adult. *In*: 4th Inter-American Congress of Cardiology, Buenos Aires, Argentina, 1952.
- GORDON, J. W.: On Certain Molar Movements of the Human Body Produced by the Circulation of the Blood. J. Anat. & Physiol., 11: 533, 1877.
- GORODETS'KAIA, E. G.; ZVONAREOVA, G. N.; SOSIENKO, T. A.; IARMOLENKO, R. A.; and ZHADANOVA, R. I.: (Ballistocardiography in Cardiovascular Pathology in Children.) Fiziol. Zh. (Kiev), 8:600-608, 1963. (Russian)
- Gorski, J.: Balistokardiogram w Pylicy Krzemowej Pluc. (Ballistocardiography in silicosis.) Polski Tygod. Lekar., 12: 830, 1957. (Polish)
- GORSKI, J.; and SMOLARZ, W.: Wplyw Odmy Oplucnej na Balistokardiogram (Effect of Pleural Pneumothorax on the Ballistocardiogram) Polski Tygod. Lekar., 12: 1273, 1957. (Polish)
- Gört, U.: Ballistokardiographische Untersuchungen am Anaesthesierten Menschen. *In:* Proc. 2nd European Symposium for Ballistocardiography, Bonn, Germany, March 27–28, 1961, p. 240.
- GÖTT, U.; and KLENSCH, H.: Kreislauf-Untersuchungen Unter den Bedingungen von Narkose und Künstlicher Blutdrucksenkung. Der Anaesthesist, 10:72, 1961.
- GOULDER, N. E.; KISSANE, R. W.; and BOHL, R. W.: Provocative Aspects of Lipotropic Therapy in Angina Pectoris. Am. Heart J., 48:906, 1954.
- Grandell, F. M.: Distortions of Ballistocardiograms; Natural Frequency of Oscillation of Human Mediastinum at Necropsy. *In:* Proc. of the Soc. for Exper. Biol. Med. (N.Y.), 88: 499-501, 1955.
- Grandell, F. M.: The Heart in Progressive Muscular Dystrophy. Am. J. M. Sc., 231:659, June 1956.
- GRAZIANI, G.: (Ballistocardiogram during Muscular Activity.) Acta Cardiol. (Brussels), 11:319, 1956. (French)

- GREEN, M. H.: Simultaneous Recording of the Electromagnetic Ballistocardiogram and Electrocardiogram on a Single Channel. U.S. Armed Forces Med. J., 4:699, 1953.
- Greenberg, M.: The Clinical Use of Ballistocardiography. J. Med. Soc. of N. J., 47: 434, 1950.
- GREGERSON, M. I.; and NICKERSON, J. L.: Relation of Blood Volume and Cardiac Output to Body Type. J. Applied Physiol., 3: 329, 1950.
- GREPPI, E.; GAINI, B.; CORTI, L.; GALLINI, R.; and PANUC-CIO, P.: (Ballistocardiographic and Phonocardiographic Study of Auricular Fibrillation Restored to Sinur Rhythm by Hydroquinidine.) Arch. Maladies Coeur (Paris), 48(10): 976, Oct. 1955. (French)
- Grob, D.; Scarborough, W. R.; Kattus, A. A.; and Landford, H. G.: Further Observations on the Effects of Automatic Blocking Agents in Patients with Hypertension. II. Hemodynamic, Ballistocardiographic and Electrocardiographic Effects of Hexamethonium and Pentathonium. Circulation, 8:352, Sept. 1953.
- Gubner, R. S.: The Diagnosis of Arteriosclerosis Including Observations on Lipid Metabolism and the Ballistocardiogram. Trans. Assoc. of Life Insurance Med. Directors of America, 71: 20, 1951.
- Gubner, R. S.: Selective Synchronous Recording of the Ballistocardiogram and Electrocardiogram on a Single Channel. Circulation, 4:239, 1951.
- Gubner, R. S.; Robstein, M.; and Ungerleider, H. E.: Ballistocardiography. An Appraisal of Technic, Physiologic Principles, and Clinical Value. Circulation, 7:268, 1953.
- Gubner, R., Robstein, M.; and Ungerleider, H. E.: The Ballistocardiogram: Normal Standards and Determinants of the Waves. Presented Before Am. Heart Assoc. Meeting, San Francisco, June 24, 1950.
- Gusman, S. M.: (Ballistocardiographic Changes in Clinically Normal Subjects Following Physical Effort and After Smoking.) Terapert. Arkh. (Moskva), 31:46, 1959. (Russian)
- Gusman, S. M.; and Khalfen, E. Sk.: Balistokardiogramma Zdorovukh Lits. (Ballistocardiogram of Healthy Subjects.) Klinich. Med. (Moscow), 36:98, 1958. (Russian)
- GUTMAN, L. B.: (Diagnostic Significance of Ballistocardiography in Rheumatic Disorders of the Heart in Pregnant Women) Pediat. Akush. Ginek., 1:37-40, 1963. (Ukranian)

н

- HAAS, H. G.: (Construction of Pendulum Ballistocardiograph with Compensation of Gravity.) Pfluger's Arch. Ges. Physiol., 263: 325, 1956. (German)
- HAAS, H. G.: Uber Ein Neues Verfahren der Ballistokardiographie. Thesis, Univ. of Bonn, 1955.
- HAAS, H. G.; and KLENSCH, H.: Kritik Ballistokardiographischer Methoden. (Critique of Ballistocardiographic Methods.) Pfluger's Arch. Ges. Physiol., 262: 107, Jan. 1956.

- HAKIM, J.; TOBIN, M.; WEISS, S. S.; McGINN, J. T.; SA-VINO, D.; and EDSON, J. N.: The Effect of Sedation on the Abnormal Ballistocardiogram of Fatigue. Am. Heart J., 54:894, Dec. 1957.
- Hamilton, W. F.: Ballistocardiography. *In:* Medical Physics, Vol. II. Year Book Publishers, Chicago, 1950. p. 152
- Hamilton, W. F.; Dow, P.; and Remington, J. W.: The Relationship Between the Cardiac Ejection Curve, and the Ballistocardiographic Forces. Am. J. Physiol., 144: 557, 1945.
- Hamilton, W. F.: Notes on the Development of the Physiology of Cardiac Output. Federation Proc., 4:183, 1945.
- Hamilton, W. F.; and Dow, P.: Cardiac and Aortic Contributions to the Human Ballistocardiogram. Am. J.
  Physiol., 133:313, 1941. (Proc. Am. Physiol. Soc. 53rd Ann. Meeting, Chicago, 1941.) (Abstract)
- Hanson, William, Jr.: (Effects of Smoking and of Nitroglycerine on 3 Patients with Coronary Heart Disease as Judged by Simultaneous Records of ULF. Ballistocardiograms and Pulse Derivative.) Am. J. Cardiol., 10:403, 1962. (Abstract)
- HARDY, J. D.: Clinicophysiologic Studies in Burns. Am.J. of Med., 20: 948, June 1956. (Abstract)
- HARDY, J. D.; and Godfrey, L.: Effect of Intravenous Fluids on Dehydrated Patients and on Normal Subjects: Cardiac Output, Stroke Volume, Pulse Rate, and Blood Pressure. J. Am. Med. Assoc., 126:23, 1944.
- Haring, Olga M.; and Luisada, Aldo A.: Studies with Intravenous Gitalin. II. Ballistocardiographic and Electrokymographic Observations. Am. Heart J., 46: 276, 1953.
- HARRISON, T. R.; LOWDER, J. A.; HEFNER, L. L.; and HARRISON, D. C.: Movements and Forces of the Human Heart. V. Precordial Movements in Relation to Atrial Contraction. Circulation, 18:82, 1958.
- HARRISON, T. R.; EDDLEMAN, E. E., Jr.; and REEVES, T. J.: Mechanism of Apex Beat in Subjects with Normal and Abnormal Hearts. Am. J. of Med., 20:949, June 1956.
- Harrison, T. R.: No. 17. Dynamics of Auricular Contraction and G-H Upstroke in the Ballistocardiogram. No. 27. The Kinetocardiogram. No. 49. Effect of Surface on the Direct Ballistocardiogram. Abstracts of the Southern Society for Clin. Res. (New Orleans), Jan. 1953.
- HARRISON, W. K.; and TALBOT, S. A.: Detection of Coronary Disease Using Objective Measurements from the Ballistocardiogram. Am. J. Cardiol., 12:580, 1963. (Abstract)
- HARRISON, W. K.; and TALBOT, S. A.: Dynamical Description of the BCG. Federation Proc., 12:62, 1953.
- HARTLEB, O.: (Changes in Ballistocardiographic Findings as a Sign of Ageing.) Med. Welt., 47:2490, 1960. (German)
- HARTLEB, O.; and WEISSBACH, G.: (Physical Considerations in Ballistocardiography.) Z. Kreislaufforsch., 48: 1133, 1959. (German)

- HARTMAN, H.: (The External Jugular Venous Tracing and the Apex Cardiogram.) In: Proc. of the 3rd European Symposium for Ballistocardiography, Brussels, Belgium, April 16–17, 1962. p. 49
- HARVEY, A. M.: Ballistocardiography. Am. J. Med. 17: 295, 1954.
- HASIK, J.; KALINOWSKI, M.; MIKOLAJCZYK, A.; and DURKALEC, J.: (Effect of Arteriosclerosis Therapy With Essential Choline Phospholipids on the Ballistocardiogram of Senile Patients in Ambulatory Conditions and at the Health Resort.) Hippokrates, 32:859, 1961.
- HAYES, R. E.: Clinical Ballistocardiography. Med. Times, (Great Neck), 81:519, 1953.
- HEALD, C. B.; and Tucker, W. S.: Recoil Curves as Shown by the Hot-wire Microphone. Proc. Roy. Soc. London, Ser. B. 93: 281, 1922.
- Helm, Robert A.; and Iglauer, Arnold: A Statistical Comparison of Normal Ballistocardiograms Recorded with a High-frequency Table and With Various Instruments which Record Body Motion Directly. Am. Heart. J., 46: 321, 1953.
- Henderson, C. B.: The Ballistocardiogram in Congenital Heart Disease. Am. J. of Cardiol., 3:799, June 1959.
- Henderson, C. B.: The Abnormal Ballistogram in Mitral Stenosis. The Relationship of the Abnormal Waves to Right Ventricular Ejection and to the Mean Pulmonary Artery Pressure. Circulation, 12:858, 1955.
- Henderson, C. B.; and Bixby, E. W.: A Simple Method of Both Seeing and Recording the Direct Body Ballistocardiogram Through the Ordinary Miscroscope, Giving a Record Easily Standardized. Am. J. Med. Sci., 225: 107, 1953.
- HENDERSON, C. B.: Ballistocardiograms After Cigarette Smoking in Health and in Coronary Heart Disease. Brit. Heart J., 15: 278, 1953.
- Henderson, Y.: The Mass-movements of the Circulation as Shown by a Recoil Curve. Am. J. Physiol., 14:287, 1905.
- HEYMANNS, V. E.; KAZMEIER, F.; et al. Die Ballistokardiographische Kreislaufuntersuchung in Threr Bedeutung bei der Anlegeuntersuchung im Bergbau. Zentr. Arbeitsmed. Arbeitsschutz, 6:260, 1956.
- HEYMANNS, V. E.; KAZMEIER, F.; SCHILD, W.; and VOIGHT, U. H. J.: Das Ballistokardiogramm als Zusatzliches Diagnostisches Hillismittel für die Beuteilung des Arbeitseinsatzes und die Einstufung bie Nachuntersuchungen. Zentr. Arbeitsmed. Arbeitsschutz, 6:277, 1956.
- HICKAM, J. B.; CARGILL, W. H.; and GOLDEN, ABNER: Cardiovascular Reactions to Emotional Stimuli. Effect on the Cardiac Output, Arteriovenous Oxygen Difference, Arterial Pressure, and Peripheral Resistance. J. Clin. Inves., 27: 290, 1948.
- HILGERS, H. H.: Weitere Vergleichsuntersuchungen Zwischen Ballistokardiographie und Direktem Fickschen Prinzip Über Den Einfluss Vasodilatorischer Substanzen. *In:* Proc. of the 3rd European Symposium for Ballistocardiography, Brussels, Belgium, April 16-17, 1962. p. 207

- HILGERS, H. H.; and BEHRENBECK, D.: Vergleichende Messungen mit der Ballistischen und der Direkten Fick'schen Methode über den Einfluss von Nitroglyzerin auf das Herzminutenvolumen. *In:* Proc. 2nd European Symposium for Ballistocardiography, Bonn, Germany, March 27–28, 1951, p. 216.
- HOFFMAN, I.; KISSIN, M.; and SCHWARZSCHILD, M. M.: Oscillation-Free Ballistocardiography. A Simple Technic and a Demonstration of its Validity. Circulation, 13:905. June 1956.
- Hohnen, H. W.; and Klensch, H.: (Ballistocardiographic Studies on the Influence of Sympathicomimetic Substances on the Stroke and Minute Volume of Man.) Z. Kreislaufforsch., 48: 915, 1959. (German)
- HOHNEN, H. W.; KLENSCH, H.: (Ballistocardiographic Determination of Beat and Minute Volume in Progressive Physical Strain.) Pfluger's Arch. Physiol., 268:221, 1959. (German)
- HOHNEN, H. W.; and Klensch, H.: Ballistische Bestimmung des Schlagvolumens bei Verminderung des Intrapulmonalen Druckes. Pflüger's Arch. Physiol., 265: 199, 1957.
- HOITINK, A. W. J. H.; and KNOOP, A. A.: Responses of the Ballistocardiogram in Dogs to Changes in Circulation by Administration of Substances with Cardiovascular Action. Acta Physiol. Pharmacol. Neerl., 5:53, 1957.
- HOLLDACK, K.: Mechanokardiographie und ihre Mogliche Erganzung durch das Ballistocardiogramm. *In:* Proc. of the 3rd European Symposium for Ballistocardiography, Brussels, Belgium, April 16–17, 1962. p. 34
- Hollis, W. J.: Systolic I-J Acceleration-force values of Normal Males From a Nickerson Type Ultra-low Frequency Ballistocardiographic System. Am. Heart J., 61: 525, 1961.
- Hollis, W. J.: The Systolic Velocity I-J Stroke Values of Twenty-five Males From a Nickerson-type Ultra-low Frequency Ballistocardiograph. Exp. Med. Surg., 18: 380, 1960.
- Hollis, W. J.: The Systolic Displacement J-M Stroke Values of Twenty-five Males From a Nickerson-type Ultra-low Frequency Ballistocardiograph. Exp. Med. Surg., 18: 226, 1960.
- Hollis, W. J.: The Systolic J-M Stroke Displacement and Gram-Centimeters Values of Fifty-one Normal Males from ULF Pendulum Ballistocardiographic System. Am. Heart J., 59: 560, April 1960.
- Hollis, W. J.: Systolic Velocity I-J Stroke Values of Normal Males and Ultra-low Frequency Pendulum Ballistocardiograph. J. of Appl. Physiol., 14: 865, 1959.
- Hollis, W. J.: The Systolic I-J Acceleration-force Values of 51 Male Subjects From an Ultra-low Frequency Pendulum Ballistocardiographic System. Am. Heart J., 57: 730, 1959.
- Hollis, W. J.: Observations on the Systolic Displacement J-M Stroke Values of 49 Normal Male Subjects from a Roller Ball-bearing Ballistocardiograph Bed. Exp. Med. Surg., 17: 111, 1959.

- Hollis, W. J.: Observations on the Systolic I-J Stroke Acceleration-force Values of 49 Male Subjects From a Roller Ball-bearing Ballistocardiographic Bed. Am. Heart J., 57: 738, May 1959.
- Hollis, W. J.: Observations on the Systolic I-J Stroke Velocity-energy Values of Fifty Normal Male Subjects From a Roller Ball-bearing Ballistocardiograph Bed. Exp. Med. Surg., 17: 37, 1959.
- Hollis, W. J.: The Ballistocardiogram by the Roll Ballbearing Technique. 2. Exp. Med. Surg., 16:54, 1958.
- Hollis, W. J.: Preliminary Observations on the Relation of the Precordial Force-thrust to Intracardiac Pressure Events. Exp. Med. Surg., 16:127, 1958.
- Hollis, W. J.: Time Relations of the Precordial Forcethrust and the Acceleration Ballistocardiogram From a Pendulum and Ball-bearing Platform. Exp. Med. Surg., 16:116, 1958.
- Hollis, W. J.: (The Ballistocardiogram by the Roller Ball-bearing Bed Technique) Cardiologia (Basle), 29: 174, 1956.
- Hollis, W. J.: (Preliminary Notations on the Roller Ballbearing Ballistocardiograph Bed; One Approach to an Aperiodic System.) Cardiologia (Basle), 28:27, 1956.
- Hollis, W. J.: Observations on the Ballistocardiogram From a Pendulum, Spring and Ball-bearing Platform and a Direct-body Air Mattress Support System. Exp. Med. Surg., 14:299, 1956.
- Honig, C. R.; and Tenney, S. M.: Influences of the Limbs on the Ballistocardiogram. Am. J. Cardiol., 1:529, April 1958.
- Honig, C. R.; and von Wittern, W. W.: Harmonic Analysis of the Ballistocardiogram. Proc. Soc. for Exp. Biol. and Med., 97: 709, 1958.
- Honig, C. R.; and Tenney, S. M.: Quantitative Ballistocardiography in Aortic Insufficiency. With a Note on the Hemodynamic Effects of a Hufnagel Valve. Am. Heart J., 54:98, July 1957.
- HONIG, C. R.; and TENNEY, S. M.: Genesis of Late Systolic and Diastolic Ballistic Vibrations. Am. Heart J., 53: 655, 1957.
- Honig, C. R.; and Tenney, S. M.: Determinants of the Circulatory Response to Hypoxia and Hypercapnia. Am. Heart J., 53:687, May 1957.
- HONIG, C. R.; and TENNEY, S. M.: Influence of the Limbs on the Ballistocardiogram. Am. Heart J., 54: 678, Nov. 1957.
- Honig, C. R.; and Tenney, S. M.: The Relationship Between the Ballistocardiogram, Cardiac Movement and Blood Flow. Am. Heart J., 52:167, 1956.
- Honig, C. R.; and Tenney, S. M.: The Aperiodic Ballistocardiogram as a Function of Age. Am. Heart J., 52:343, Sept. 1956.
- HORWITZ, O.; MAYOCK, R. I.; and STARR, I.: Direct Experiments on the Interpretation of the Ballistocardiogram. Am. J. Med. Sci., 216: 116, 1948.
- HORWITZ, O.; MAYOCK, R. L.; and STARR, I.: Direct Experiments on the Relation Between the Form of the

- Beg and the Shape of the Systolic Velocity Curve in the Aorta of Man. Federation Proc., 7: 57, 1948.
- Huang, M. H.; Yu, K. J.; Chin, H. Y.; and Hsu, H. F.: (Ballistocardiographic Changes in Hypertension and Hypertension Associated with Coronary Heart Disease. Chin. Med. J., 28: 202–207, 1963. (Chinese)
- Huang, M. H.; and Yu, K. J.: (Ballistocardiographic Changes in Rheumatic Mitral Valvular Disease.) Chin. Med. J., 75:693, 1957. (Chinese)
- Huegin, W.: The Ballistocardiographic Picture Before and After Surgery in Aortic Isthmus Stenosis. Thoraxchirurgie, 8:56, 1961. (German)
- Huegin, W.: Ballistocardiographic Studies on FluothaneAnesthesia.) Helv. Chir. Acta., 28:372, 1961. (German)
- HUEGIN, W.; and EGER, W.: Ballistocardiographic Studies on the Effect of Vasopressor agents in Halothane Anesthesia. Anaesthetist, 10: 44, 1961.
- Huegin, W.; and Eger, W.: Ballistocardiographic Studies in the Problem of Resistance Changes in Peripheral Circulation Induced by Thiopental or Cyclopropane Anesthesia. Anaesthetist, 10: 46, 1961.
- HÜGIN, W.: See Huegin, W.
- Hupka, J.: (Ballistocardiography and its Clinical Use.) Bratislav. Lekarske. Listy., 33:81, 1953.
- HUTTMANN, A.; TAFFET, E.; and CZEIZNER, L.: (Ballistocardiography: Method and Results.) I Med. Int. Becur., 7: 137, 1955.
- HUTTON, G. C.; BUCKINGHAM, W.; WENDEL, G.; and SUTTON, D. C.: Physical Characteristics of the Ballistocardiographic Record as Recorded by the Portable Electromagnetic Type Machine. J. Lab. and Clin. Med., 40: 944, 1952.
- IANUSHKEVICHUS, V. I.; and VIETENSHTEINAS, G. A.: (On the Problem of Clinical Significance and Classification of Ballistocardiograms.) Terapetv. Arkh, 31:31, 1959.
- ILIESCU, C. C.; HARNAGEA, P.; PANTZER, M.; and TLEINER-MAN, L: Aspecte Balistocardiografice m Bolile Congenitalk de Inima. (Ballistocardiographical Aspects of Congenital Heart Disease) Probl. Card. Bucur., 3: 111, 1958
- ILLANES, A.; and ARMIJO, G.: (Ballistocardiographic Respiratory Variations in the Normal Child.) Rev. Med. Chile (Santiago), 82(8):470-3, 1954. (Spanish)
- ILLANES, A.; and Armijo, G. (Ballistocardiography in Normal Children.) Rev. Med. Chile (Santiago), 82–(6): 408-13, 1954. (Spanish)
- ILLANES, A.; and ARMIJO, G.: (Changes in the Ballisto-cardiogram of a Normal Child After Master's Exercise Test.) Rev. Med. Chile (Santiago), 82:581-3, 1954. (Spanish)
- INURRITEGUI, R. C.: Ballistocardiographical Study of Normal Subjects Soon After Arrival From High Altitudes. Ann. Fac. Med. (Lima), 36: 367, 1953.

(19)

- Invernezzi, G.; and Complani, G.: Ballistocardiographic Study of the Premature Newborn.) Quad. Clin. Ostet. Ginec., 15: 368, 1960.
- ISAACS, J.; WILBURNE, M.; and GUNTHER, L.: Ultra-low Frequency Acceleration (Force) Ballistocardiogram in Myocardial Infarction. Am. J. of Cardiol., I:323, March 1958.
- ISRAEL, A. H.: (Ballistocardiography in Coronary Disease.) Rev. Med. Moyen-Orient. (Beirut), 10:14, 1953.
- ISRAEL, A. H.: (Ballistocardiography). J. Med Libanais (Beirut), 5:259, 1952.
- ISTVAN, K.; and VILMOS, G.: Ballistokardiographias Vizsgalatok Vitiumos Betegekem. Magy. Belorv. Arch. (Budapest), 6:175, 1955. (Hungarian)
- ITATSU, HIDETAKA: (Ballistocardiography: Clinical Studies) Resp. & Circ., 5:556, 1957. (Japanese)
- Ito, Susumu: (A Study of Cardiac Output Using the Ballistocardiogram) Circ. J., 14:179, 1950. (Japanese)
- Iun'ev, S. A. (Simultaneous Registration of the Displacement Velocity Acceleration of the Body in Ballistocardiography). Med. Promyshl. SSSR, 7:22, 1961. (Russian)
- IZAK, G.; and BRAUN, K.: The Ballistocardiogram in Mitral Valvular Disease. Brit. Heart J. (London), 18(1): 44, Jan. 1956.
- Jackson, C. E.: Nomogram for Simple Calculation of Cardiac Output. Circulation, 11: 635, 1955.
- JACOBS, H. D.: Ballistocardiographic Observations. Brit. Heart J., 16: 79, Jan. 1954.
- Jacquet, M.; and Merlen, F. J.: (Registration of the Carotid Artery Pressure and Ballistocardiography in Neurocirculatory Asthenia.) Arch. Maladies Coeur (Paris), 48(10): 948, Oct. 1955.
- Jansen, G.: Vergleichende Ballistografische Messungen bei Musik und Breitbandgerauschen. In: Proc. of the 3rd European Symposium for Ballistocardiography, Brussels, Belguim, April 16-17, 1962. p. 267.
- Jansen, G.: Ballistocardiogramm und Larm. In: Proc.2nd European Symposium for Ballistocardiography,Bonn, Germany, 1961, p. 226
- JAQUEROD, R. L.: Le Balistogramme d'Effort Chez le Jeune Adulte. Univ. de Lausanne, 1958.
- Job, J. M.: Ballistocardiographia. Estudio Critico e Experiencia Pessoal. Thesis, Univ. Rio Grande do Sul. 1954. (Monograph)
- Jochweds, B.; Caernik, A.; and Ostrowski, K.: Badania nad Wplywem Malych Dawek Strofantyny na Balistokardiogram. Polski Tygod. Lekar., 14:20, 1959.
- JOCHWEDS, B.; OSTROWSKI, K.; and SERZYSKO, W.: (Effect of Intravenous Injections of Scillaren on the Ballistocardiogram.) Polskie Arch. Med. Wewnetrznej, 29: 775, 1959. (Polish)
- JOHNSON, V.; HAMILTON, W. F.; KATZ, L. N.; and WEINSTEIN, W.: Studies on Dynamics of Pulmonary Circulation. Am. J. Physiol., 120: 624, 1937.

- Selected Translations on Dynamocardiography in the USSR (Compilation of 7 Papers Translated into English from the Russian.) U.S. Joint Public. Research Service, Washington, D.C., 1962 as JPRS No. R-2039-D, 1962 (FAA 2-9627-1)
- JOKL, E.: Cardiovascular Responses to Exercise Concerned in Rehabilitation of Cardiac Patients. Am. J. of Cardiol., 7: 320, 1961.
- JOKL, E.; ARBEIT, S. R.; and McCubbin, W. E.: (Atrial Fibrillation and Low Grade Ballistocardiographic Response in 88 Year Old Gymnast.) Med. Sportiva, 14:5, 1960.
- JOKL, E.; and Arbeit, S. R.: Atrial Fibrillation and Low Grade Ballistocardiographic Response in 88 Year Old Gymnast. BCG Research Soc. (Atlantic City, N.J.), May 2, 1959. (Abstract)
- JOKL, E.: Ballistocardiographic Studies on Athletes. Am. J. of Cardiol., 4:105, July 1959.
- JOKL, E.; KOSKELA, A.; McCubbin, W.; Jokl, P.; and Arbeit, S. R.: Physical Efficiency, One of the Determinators of Ballistocardiographic Patterns. Am. J. Cardiol., 1: 530, 1958. (Abstract)
- JOKL, E.; ARBEIT, S. R.; McCubbin, W.; Grenier, G.; Koskela, A.; and Jokl, P.: Ballistocardiographic Studies on Olympic Athletes. (Symposium on Treatment of Mycardial Infraction.) Am. J. Cardiol., 1:199, 1958.
- JONES, R. J.: The Nickerson Ballistocardiogram in Arteriosclerotic Heart Disease With and Without Congestive Failure. Circulation, 6: 389, 1952.
- Jones, R. J.: The Ballistocardiograph. Modern Concepts of Cardiovascular Disease, 20: 87, 1951.
- JONES, R. J.; and GOULDER, N. E.: An Empiric Approach to the Interpretation of the Low-frequency, Critically Damped Ballistocardiogram. Circulation, 2: 756, 1950.
- JONES, R. J.; and GOULDER, N. E.: The Hypertensive Pattern in the Critically Damped Ballistocardiogram. J. Clin. Invest., 29: 826, 1950.
- JONGBLOED, J.: (Two methods of Ballistocardiography). Ned. Tydschr. Geneesk, 95: 2122, 1951.
- JONNART, L.: Segmental Gravimetry and B.C.G. In: Proc. of the 3rd European Symposium for Ballistocardiography, Brussels, Belgium, April 16-17, 1962. p. 215
- JONNART, L.: Discours d'ouverture du President. *In:* Proc. of the 3rd European Symposium for Ballistocardiography, Brussels, Belgium, April 16-17, 1962. p. 5
- Jonnart, L.: Auricular Activity From the Ballistocardiogram. In: Proc. 2nd European Symposium for Ballistocardiography, Bonn, Germany, March 27–28, 1961. p. 35
- JONNART, L.: Die Ballistocardiographie im Rahmen der Werksmedizin. Sonderdruck, 8:3, 1961.
- JONNART, L.: Le Ballistocardiogramme d'Unira-basse Frequence. Acta Cardiol., 9:1, (Suppl. 9), 1960. (French). (Monograph)

- JONNART, L.; and GHYS, A.: A Study of the Human Ballistocardiogram. II. The Acceleration Ballistocardiogram. Acta Cardiol., 8:232 (Fasc. 3), 1953. Also in Circulation, 9:457, 1954. (Abstract)
- JONNART, L.; and LEQUIME, J.: (New Methods of Ballistocardiography.) Arch. Maladies Coeur, 46:752, 1953. (French)
- JONNART, L.: (Study of the Human Ballistocardiogram. I. Technique.) Acta Cardiol., 7:432, 1952. (French)
- JONNART, L.; and LEQUIME, J.: Étude Physique de Balistocardiogramme. (Physical Study of Ballistocardiography) Congres European de Cardiologie, (London), 1952.
- JORDAN, R. H.; PATY, P. B.; and NEAL, J. J. Jr.: The Construction of a Sensitive Accelerometer. J. Lab. Clin. Med. 51: 163, 1958.
- Josenhans, W.: Experimental Analysis of the Ultra-low Frequency Ballistocardiogram by Means of a Circulation Model. *In:* Proc. 2nd European Symposium for Ballistocardiography, Bonn, Germany, March 27-28, 1961, p. 201
- Jouve, A.; and Ambrosi, C.: (The Exertion Ballistocardiogram in the Diagnosis of Various Coronary Anginas).

  Marseille Med., 100: 91-100, 1963. (French)
- Jouve, A.; and Ambrosi, C.: (The Exertion Ballistocardiogram in the Diagnosis of Certain Coronary Angina Cases). Mal. Cardiovasc., 3:539-550, 1962. (French)
- Jouve, A.; and Ambrosi, C.: Le Balistocardiogramme d'Effort dans le Diagnostic de Certains Angors Coronariens. *In:* Proc. of the 3rd European Symposium for Ballistocardiography, Brussels, Belgium, April 16–17, 1962. p. 146
- Juznic, G.; and Klensch, H.: Comparative Investigations of Cardiac Stroke Volume by Quantitative Ballistocardiography and Steward-Hamilton Dye Dilution Method in Small Laboratory Animals. *In:* Proc. of the 3rd European Symposium for Ballistocardiography, Brussels, Belgium, April 16–17, 1962. p. 199
- JUZNIC, G.: The Normal Ballistocardiogram of the Guinea Pig. In: Proc. of the 2nd European Symposium for Ballistocardiography, Bonn, Germany, March, 1961. p. 191

K

- KANDALLA, F. A.: Ballistocardiographic Assaying of Siccacell Therapy in Myocardial Degenerations. In: Proc. of the 3rd European Symposium for Ballistocardiography, Brussels, Belgium, April 16–17, 1962. p. 276
- KARDASZEWICZ, E.: Balistokardiogram w Wadach Zastawki Dwridzielnej. (Ballistocardiogram in Bicuspid Valve Defects.) Polski Tygod. Lekar., 13: 1357, Sept. 1, 1958. (Polish)
- KARPMAN, V. L.: (On the Analysis of the Kinetics of the Human Body During Cardiac Contractions [Vectoballistocardiographic Study].) Biofizika, 5:430, 1960.
- KARPMAN, V. L.: (Absolute and Relative Duration of Ventricular Systolic Phases.) Bull. Eksp. Biol. Med., 43:9, 1957. (Russian)

- KARPMAN, V. L.: (Use of Dynamocardiography in Physiological and Clinical Investigations.) Vest. Akad. Med. Nauk SSSR, 4:71, 1957. (Russian) English Translation by U.S. Joint Publications Res. Serv., Wash., D.C. as JPRS R-2039-D, Feb. 2, 1962.
- Karpman, V. L: (Ballistocardiography.) Candidatis Dissertation, 1956. (Russian)
- Kask, E.: The Ballistocardiogram in General Practice. G.P. 21:129, 1960.
- KAUFMAN, J. M.; CAPUTO, N. T.; and SANCHEZ, S. A.: The Ballistocardiogram; Its Role in Heart Disease. J. Mich. Med. Soc., 53: 48, 1954.
- KAUFMAN, J. M.; CAPUTO, N.; and SANCHEZ, S.: Ballistocardiography. Harper Hosp. Bull., (Detroit), 11:4, 1953.
- KAUFMAN, W.: New Weapons Against Heart Disease. Coronet. 33: 26, 1953.
- KAZMEIER, F.; MEISTER et al.: Physikalische Grundlagen der Ballistokardiographie. Elektromed., 4:97, 1959.
- KAZMEIER, F.; and Schild, W.: (Progress in Ballistocardiography.) Medizin., 2:73, 1958. (German)
- KAZMEIER, F.; and SCHILD, W.: Ballistokardiographie, Elektromedizin (Berlin), 2:42, 1957.
- KAZMEIER, F.; SCHILD, W.; VOIGHT, H. J.; and HEYMANNS, E.: (Simple Methods of Circulatory Research on 450 Miners; Statistical Evaluation.) Arch. Kreislaufforsch, 25:178, 1957. (German)
- KAZMEIER, F.; and SCHILD, W.: (Clinical Usefulness of Ballistocardiograms.) Munch. Med. Wochensch., 98: 753, 1956. (German)
- KAZMEIER, F.; KOLLENBACH, K. F.; SACHSE, H.; and SCHILD, W.: (The Ballistocardiogram in 6 Cases of the W-P-W Syndrome.) Z. Klin. Med., 153:537, 1956. (German)
- KAZMEIER, F.; and SCHILD, W.: (Construction of the Vector-Ballistocardiogram From Three Direct Leads.) Z. Kreislaufforsch., 45:345, 1956. (German)
- KAZMEIER, F.; KOLLENBACH, K. F.; and SCHILD, W.: (Ballistocardiogram in Dyschronous Activation of the Heart Chamber.) Deuts. Arch. Klin. Med., 202:312, 1955. (German)
- KAZMEIER, F.; and SCHILD, W.: (Construction of Vectorballistocardiograms From Three Leads.) Z. Kreislaufforsch., 44:537, 1955. (German)
- KAZMEIER, F.; and Schild, W.: (Direct Ballistocardiography and its Application in Clinical Practice.) Medizin., 14:475, 1955. (German)
- KAZMEIER, F.; SACHSE, H.; SCHILD, W.; and WEISE, H.: (Ballistocardiographic Studies of Patent Ductus Arterosus.) Z. Kreislaufforsch., 44:947, 1955. (German)
- KAZMEIER, F.; and SCHILD, W.: (The Influence of Respiration on the Ballistocardiogram.) Cardiologia, 27:97, 1955. (German)
- KAZMEIER, F.; and SCHILD, W.: (The Question of the Effects of the Vascular Changes in the Formation of the Ballistocardiographic Curves.) Med. Monatsschr., 9:374, 1955. (German)

- KAZMEIER, F.; and SCHILD, W.: (Problems of the Origination of the H-Wave in Ballistocardiography.) Z. Kreislaufforsch., 44:300-14, 1955. (German)
- KAZMEIER, F.; und SCHILD, W.: Einfaches Indizes der Quantitaviven Ballistokardiographie. Naturwissenschaften, 42:79, 1955. (Kurze Original-Mitteillumgen)
- KAZMEIER, F.; and SCHILD, W.: Einfache Indized der Quantitativen Ballistokardiographie. Naturwissenschaften, 3:1, 1955. (German)
- KAZMEIER, F.; and SCHILD, W.: Ballistocardiographie Fortschr. Med., 18: 191, 1955.
- KAZMEIER, F.; and SCHILD, W.: (Calculations of Physical Quantities and their Indices by Direct Ballistocardiography.) Arztl. Forsch., 9:70, 1955. (German)
- KAZMEIER, F.; and Schild, W.: (Ballistocardiographic Changes Related to Aging.) Z. Altersforsch., 8:212, 1955. (German)
- KAZMEIER, F.; and SCHILD, W.: (Ballistocardiography in Lung Disease.) Z. Ges. Inn. Med. Ihre Grenzgebiete, 10: 831, 1955. (German)
- KAZMEIER, F.; SCHILD, WALTER; and SCHILD, WILLY: (The Effects of Sex Hormones and Vascular Processes Caused by Aging on the Ballistocardiogram.) Zentr. Gynaekol., 76: 2027, 1954. (German)
- KAZMEIER, F.; and SCHILD, W.: (Quantitative Evaluation of Direct Ballistocardiograms.) Z. Kreislaufforsch., 43:791, 1954. (German)
- KAZMEIER, F.; and SCHILD, W.: (The Value of Gaugings in Direct Ballistocardiography.) Z. Kreislaufforsch., 43:610, 1954. (German)
- KAZMEIER, F.; and SCHILD, W.: (Ballistocardiographic Studies of Blood Circulation.) Deut. Med. Wochschr., 79:1868, 1954. (German)
- Keefer, C. S.: The Ballistocardiogram in Clinical Research and Diagnosis. Boston Med. Quart., 1:25, 1950.
- Kelly, J. J.; Caccese, A.; Ortiz-Marquez, J.; and Taubman, F.: The Effect of Cigarette Smoking on the Ballistocardiograms of High School Youths. Am. Heart J., 47:30, 1954.
- KEMP, G. L.: Ballistocardiography as an Adjunct in Clinical Cardiology. J. Am. Osteopath. Assoc., 57:378, Feb. 1958.
- Kesteloot, H.; and Joossens, V. V.: Le Pouls Veineux Jugulaire. Confrontation Hemodynamique. *In:* Proc. of the 3rd European Symposium for Ballistocardiography, Brussels, Belgium, April 16-17, 1962. p. 64
- KHEINONEN, I. M.; and Kokosov, A. N.: (Ballistocardiographic Changes in Myocardial Infarcts.) Terapevt. Arkh. (Moscow), 32:75, 1960. (Russian)
- KIDANOVA, Z. S.: (Ballistocardiographic Observations on Patients with Tuberculosis of the Lungs.) Probl. Tuberk., 40: 49, 1962. (Russian)
- KITADA, SHIGERU: (Some Problems in Ballistocardiography as Viewed from Basic Aspects.) Respiration and Circulation, 5:533, 1957. (Japanese)

- KITTLE, C. F.; REISSMAN, K. R.; DIMOND, E. G.; and Schafer, P. W.: Torsion Ballistocardiography in Cardiovascular Surgical Patients. J. Thorac. Surg., 27: 107, 1954. Also in: Circulation, 11:300, 1955. (Abstract.)
- KLENSCH, H.: (Circulatory Reactivity in Normal Persons and Coronary Patients After Cigarette Smoking [New Results and a Quantitative Ballistocardiographic Smoking Test].) Arch. Kreislaufforsch, 41:1-26, 1963. (German)
- KLENSCH, H.: Der Informationscharakter der Modernen Ballistographie. Elektromed. 6: 104. 1961.
- Klensch, H.: Ein Kleintier-ballistokardiograph. Z. Kreislaufforsch, 50:350, 1961.
- Klensch, H.: Erfahrungen aus 8 Jahren Tier- und Menschenphysiologischer Untersuchungen mit der Ultraniederfrequenten Ballistographie. *In:* Proc. of the Third European Symposium for Ballistocardiography Held at Brussels (Belgium), p. 93. April 16–17, 1962.
- KLENSCH, H.: Fibrinolytische Aktivitat und Kreislaufwirkung der Nicotinsaure [Ein Beispiel fur die Anwendung der Ballistokardiographie bei Pharmakologischen Fragestellungen]. In: Proc. 2nd European Symp. for Ballistocardiography, Bonn, Germany, Mar. 27-28, 1961, p. 251.
- KLENSCH, H.: (The Force-free Ballistocardiogram [Displacement-ballistocardiography]) Pflüger's Arch. Physiol., 262: 272, 1956. (German) English Translation by Roger D. Freeman; Edited by Wm. R. Scarborough, M.D., 1957.
- KLENSCH, H.: (The Frog's Ultra-Low Frequency Ballistocardiogram.) In: Proc. of the 1st Congress of the Soc. for Ballistocardiographic Research. "Woudschoten", Ziest, The Netherlands, Apr. 1960.
- KLENSCH, H.: Probleme der Ballistischen Schlag-Volumen-Bestimmung. In: Proc. 4th European Symposium for Ballistocardiography, Lille, France, April 8-9, 1963.
- KLENSCH, H.: Methodirche Voraussetzungen für die Branch Barkeib der Ballistocardiographie. Vek. der Deutrihen jes. f. Weislaufforsch. 21. Tagung: 455, 1955.
- Klensch, H.: (The Regulaton of Stroke Volume by the Resistance of the Peripheral Vessels.) Verhand. Deuts. Gesell. Kreislaufforsch., 25:252, 1959. (German) Summary (only) translated and Edited by G. N. Jager and Wm. R. Scarborough—August 1963.
- Klensch, H.: Tagungsberichte, Bericht über das 2nd Europäische Symposion für Ballistokardiographie in Bonn, (Marz), 1961. Z. Kreislaufforsch., 50: 713, 1961.
- Klensch, H.; and Alieff, A.; Der Kreislauf des Frosches bei Anderung seiner Korpertemperatur. (The Circulation of the Frog with Changes in Body Temperature.) Z. Kreislaufforsch., 51:211, 1962. (German) English Translation (personal) by G. N. Jager, M. S.; edited by Wm. R. Scarborough, M.D. July 31, 1963.
- KLENSCH, H.; and CASPARI, R.: Schlag-und Minutenvolumen des Herzens unter dem Einfluss Strahlender Wärme. Pflüger's Arch., 267: 591, 1958.

- KLENSCH, H.; and co-workers: German-English Report on Ballistocardiographic Investigations Including List of Published Papers and Presentations. Internal Report, Physiologic Institute, Univ. of Bonn, (Ger.), June 1959. English Translation of 25 German Titles by G. N. Jager, M.S.; Edited by Wm. R. Scarborough, M.D.—August, 1963.
- KLENSCH, H.; and EGER, W.: (Ballistocardiography on a Circulatory Model) Verh. Deuts. Ges. Kreislaufforsch., 22:279, 1957. (German)
- KLENSCH, H.; und EGER, W.: Ballistographie an einem Modellkgreislau f. Verh. Deuts. Ges. Kreislaufforsch., 22. Tagung, 1956, p. 279.
- KLENSCH, H.; and EGER, W.: (A New Method for the Physical Determination of the Stroke Volume [Quantitative Ballistocardiography]) Pflüger's Arch. Physiol., 263:459, 1956. (German) English translation by Urs Gessner, M.S.; Edited by Wm. R. Scarborough, M.D., June 1958.
- KLENSCH, H.; and EGER, W.: (Determination of Stroke Volume from the Ballistocardiogram; Preliminary Report.)
   Deutsch Med. Wochenschr., 81:1205, 1956. (German)
- KLENSCH, H.; and EGER, W.: Qualitative und Quantitative Ballistographische Untersuchungen am Modellkreislauf. Pflüger's Arch. Physiol., 262: 433, 1956.
- KLENSCH, H., and GOTT, V. U.: Kreislauf-untersuchungen Unter den Bedingungen von Narkose und Kunstlicher Blutdrucksenkung. Anaesthetist, 3:72, 1961.
- KLENSCH, H.; and HOHNEN, H. W.: (Determination of Cardiac Output and Minute Volume After Work Performance with the Ballistic Method) Pflüger's Arch. Physiol., 265: 207, 1957. (German)
- KLENSCH, H.; and JUZNIC, G.: (The Stewart-Hamilton Test Substance Method Using the Arteriovenous Sling.) Pflüger's Arch. Ges. Physiol., 275: 547, 1962.
- KLENSCH, H.; and JUNZIC, G.: Versuch einer Quantitativen Auswertung des BKG-Smoking Tests. In: Proc. of the 3rd European Symp. for Ballistocardiography, Brussels, Belgium, Apr. 16-17, 1962, p. 259.
- KLENSCH, H.; and KALLFELZ, H. C.: Das Basale Schlagund Minutenvolumen des Herzens bei Kindern und Jugendlichen im Alter von 9-022 Jahren. In: Proc. of the German Society for the Study of Circulation (Verhandlungen der Deutschen Gesellschaft für Kreislaufforschung), 1958, p. 214-220.
- KLENSCH, H.; HOHNEN, H. W.; and KESSLER, K. H.: (Ballistic Evaluation of the Beat-by-beat Stroke Volume with Changing Respiratory Conditions and Increasing Intrapulmonary Pressure) Pflüger's Arch. Physiol., 264: 424, 1957. (German)
- KLENSCH, H.; HOHNEN, H. W.; and RICHTER, W.: Das Schlagvolumen des Herzens vor und nach Operation Traumatischer Arteriovenöser Fisteln der Unteren Extremitäten. Kreislaufforsch., 48:153, 1959.
- KLENSCH, H.; HOHNEN, H. W.; WOLFERS, H.; and WOLFERS, W.: (The Diagnosis of Coarctation of the Aorta by

- Means of the Ballistocardiogram.) Klin. Wochenschr., 35:1039, 1957 (German) English Translation by G. N. Jager; Edited by Wm. R. Scarborough, August 1963.
- KLENSCH, H.; SCHAEDE, A.; THURM, P.; CASPARI, R.; and HILGER, H.: (Comparative Study of Cardiac Output with the Ballistic and the Direct Fick Methods) Pflügers Arch. Physiol., 269: 232, 1959. (German) Summary (only) translated by G. N. Jager; Edited by Wm. R. Scarborough—August 1963.
- KLINGHOFER, L.; and DAVID, A.: (Ballistocardiographies in Fifty Patients.) Orvosi Hetil. (Budapest), 96:219– 21, 1955. (Hungarian)
- KLINGHOFER, L.; and DAVID, A.: (Pathological Ballistocardiogram.) Magy. Belorv. Arch. Ideggyogy. Szemle, 8:179, 1955. (Hungarian)
- KLINGHOFER, L.; NEMETH, E.; VILAGI, G.; and DAVID, A.:
  A Ballistocardiographia a Szervi es Ideges Eredetu
  Szivpanaszok Elkuloniteseben. (Ballistocardiography
  in Differentiation of Heart Complaints of Organic and
  Nervous Orgin.) Magyar Belorv. Arch., 10:41, Apr.—
  June 1957. (Hungarian)
- KLINGHOFER, L.; NEMETH, E.; VILAGI, G.; and DAVID, A.: Ballistokardiographie in der Differenzierung Organischer und Nervoser Herzleiden. (Ballistocardiography as a Means of Differentiation Between Organic and Nervous Heart Disease. II.) Med. Abt. des Komitatskrankenh., Gyor. Z. Ges. Inn. Med., 12:419, 1957. (German)
- KLIORINA, N. F.: (Ballistocardiography in Acute Myocardial Infarction.) Klinich. Med., 41:45, 1963. Translation in Federation Proc. (Suppl. Vol. 23, No. 2, Part II), 23: T928, 1964.
- KNOOP, A. A.: (Experimental Investigations On The Ultra-low Frequency Displacement Ballistocardiography.) Thesis: Free University of Amsterdam (Amsterdam, The Netherlands), 1962. English translation by P. van der Kruk, 1963; Edited by A. Noordergraaf, G. N. Jager, and Wm. R. Scarborough.
- KNOOP, A. A.: (Experimentele Onderzoekingen Over de Ultra-laag Frequente Versplaatsingsballistocardiographie.)
  Thesis, Free U. of Amsterdam, The Netherlands.
  125 p. 44 figs. (Text in Dutch with Summary and Conclusions in English.) 1962.
- Knoop, A. A.: (Factors to be Allowed for in Determining the Stroke Volume from the Ballistocardiogram.) *In:* Proc. of the 4th Europ. Congress of Ballistocardiography (Soc. for Ballistocardiographic Research), Lille, April 1963.
- KNOOP, A. A.: Vectorballistocardiography. (Motion Picture Demonstrating the One- and the Two-Dimensional Displacement and Acceleration Ballistocardiograms of Man and of the Dog; Normal and Experimental Curves Shown). 4th Congress of Ballistocardiography (Soc. for Ballistocardiographic Res.), Lille, France. April 1962

- KNOOP, A. A.; and HOITINK, A. W. J. H.: (A Combined Ultra-low Frequency and High Frequency Ballistocardiograph.) Acta Cardiol., 13:39, 1958.
- KNOOP, A. A.; and HOITINK, A. W. J. H.: (Experimental Investigations of the Ballistocardiogram When the Circulation is Influenced.) Acta Physiol. Pharmacol. (Neerland), 4:430, 1955. (Abstract)
- Knoop, A. A.; and Hoitink, A. W. J. H.: The Ultra-low Frequency Ballistocardiogram of the Dog. Effects of Artificial Occlusion of the Aorta. *In:* Proc. of the First Congress for Ballistocardiographic Research, "Woudschoten", Ziest, The Netherlands, April 1960.
- KNOOP, A. A.; and HOITINK, A. W. J. H.: (The Ultra-low Frequency Displacement Ballistocardiogram of the Dog During Artificial Occlusion of the Aorta.) Acta. Cardiol., 16: 201, 1961.
- Knoop, A. A.; Pretorius, P. J.; and Hoitink, A. W. J. H.: Differences Between the Human and Canine Ballistocardiogram. *In:* Proc. 2nd European Symposium for Ballistocardiography (Soc. for Ballistocardiographic Research), Bonn, Germany, March 1961. p. 180.
- Knoop, A. A.; Pretorius, P. J.; and Hoitink, A. W. J. H.: (Vectorballistocardiography.) Proc. of the Third European Symposium for Ballistocardiography Held at Brussels, (Belgium), p. 121, April 16–17, 1962.
- Knowles, J. L.; Eddleman, E. E., Jr.: Kinetocardiographic and Ballistocardiographic Changes as a Result of Nitrites. Clin. Res. Proc., Vol. III, No. 1, February, 1955.
- Kodejszko, E.; and Czernik, A.: (Ballistocardiography and its Clinical Significance.) Polskie Arch. Med. Wewnetrznej., 23:805, 1953. (Polish)
- Kodejszko, E.; and Czernik, A.: (Ballistocardiography and its Clinical Significance.) Polskie Arch. Med. Wewnetrznej, (Warsaw), 24(1): 39-62, 1954. (Polish)
- Kodejszko, E.; and Czernik, A.: (Clinical Usefulness of Ballistocardiography.) Polski. Tygod. Lekar., 8:1385, 1953. (Polish)
- KOEPPLIN, F.: (Diagnostic Usefulness of Ballistocardiograms in Anginous Heart Diseases.) Kreislaufforsch., 45(9-10): May, 1956. (German)
- KOEFFLER, A.: An Electro-ballisto-Cardiograph Selector Switch and a Permanently Wired Table. Connecticut Med. J., 17: 759, 1953.
- Kogan, A. B.; and Tambiev, E. A.: (An Installation for Complex Dielectro-ballisto-Electrocardiographic Examination.)Biull. Eksp. Biol. Med., 48:109, 1959.
- Komarv, B. D.: Dinamokardiograficheskoe Issledovanie Zdorovykh detei v Vozroste ot 8 do 15 Let. (Dynamocardiographic Examination of Healthy Children Aged 8 to 15 Years.) Bull. Exsper. Biol. Med., 46:10, 1958. (Russian)
- KOOMEN, J. J. M.; and WESTERHOF, N.: (Calculation of the Ballistocardiogram From the Left Ventricular Ejection curve). Internal Report, V 2025, Dept. of Med. Physics, Physics Laboratory, State Univ. of Utrecht, (The Netherlands), 1964. (Dutch) (Abstract in English)

- KOPEIKO, I. P.; AGRACHEV, G. I.; and KIDANOVA, Z. S.:
  (Direct and Indirect Methods of Diagnosing Pulmonary Hypertension [Cardiac Catheterization, Ballistocardiography, Electrocardiography]) Klinch. Med. (Moscow), 41:116-120, 1963. (Russian)
- KORY, R. C.; ROEHM, D. C.; and MENEELY, G. R.: The Ballistocardiographic Response to Depressor Drugs.

  Abst. Proc. Am. Fed. Clin. Res., National Meeting, 1952.
- Kosmider, S.; and Petelenzowa, T.: (Ballistocardiographic Evaluation of the effect of Omentocsrdiopexy on the Course of Experimental Myocardial Infarcts.) Pat. Pol., 11:227, 1960. English Translation of Polish text by NASA as NASA-TT-F-8533, Nov. 1963.
- Krahl, V. E.: The Electric Strain Gauge Ballistocardiograph. Am, Heart J., 39: 161, 1950.
- Krahl, V. E.: New Apparatus for the Study of Cardiac and Circulatory Ballistics. Anal. Rec., 97:34, 1947. (Proc. Am. Assoc. Anal. 10th Ann. Meet.).
- Krahl, V. E.: A Simple Laboratory Apparatus for the Demonstration of Cardiac Ballistics. Science, 105:393, 1947.
- Krasno, L. R.; and Kidera, G. J.: The Ballistocardiographic and Plethysmographic Responses of "Normal" and Cardiac Patients to Nitroglycerin. Aero. Med., 31:925, 1960.
- Kummer, P., and Gnatzy, H.: (Ballistocardiography.) Munch. Med. Wschr., 96:117, 1954. (German)
- Kummer, P.; Landes, G.: (Dependency of Ballistocardiographic Stroke Volume Determination From the Damping of the Vascular System.) Z. Kreislaufforsch., 42: 219, 1953. (German)
- Kunos, I: (Importance of Cardiograms in Diagnosis of Stenosis of the Great Vessels.) Z. Kreislaufforschung, 45(5-6):217, 1956. (German)
- Kunos, I.; and Garan, V.: (Ballistocardiographic Studies in Valvular Heart Disease.) Z. Kreislaufforsch., 44: 814, 1955. (German)
- Kunos, 'I.; and Garan, V.: (Ballistocardiography in Cardiovascular Defects.) Magyar Belorvois Arch. 8: 175, 1955. (Budapest)
- Kuo, P. T.; and Joyner, C.R.: Angina Pectoris Induced by Fat Ingestion in Patients with CAD: BCG and EKG Findings. J. Am. Med. Assoc., 1958:1008, July 1955.
- Kuo, P. T.; Schnabel, T. G., Jr.; and Kay, C. F.: On Certain Abnormal Ballistic Complexes: Their Relationships to Other Mechanical and Electrical Events of the Cardiac Cycle. Circulation, 6:74, 1952.
- Kuznetsova, O. D.: (Ballistocardiographic Changes in Rheumatism) Terapetr. Arkh., 32:42, 1960. (Russian)
- Kylstra, J.: Registration of Acceleration With the Aid of the U-effect. Nederland. Tijdschr. Voor Geneeskunde 100: 911, 1956.
- KYLSTRA, J.: (Use of the So-called U Effect in Recording of Accelerations.) Aeromed. Acta (Soesterberg), 3: 271, 1954.

- DELALLA, V. Jr.; and Brown, H. R., Jr.: Respiration Variation of the Ballistocardiogram. Am. J. Med., 9:728, 1950.
- DELALLA, V.; and Brown, H. R.: Effect of Forced Expiration Upon Finger and Pulse Volume. Proc. Soc. Exp. Bio. Med. 69: 111, 1948.
- DELALLA, V.; EPSTEIN, M. A.; and Brown, H. R.: Analysis of H Wave Ballistocardiogram. Circulation, 2:765, 1950.
- LAMPORT, H.: The Origin of the Ballistocardiograph. Science, 93:305, 1941.
- LANTREIBECQ, P.: Le Balistocardiogramme au Cours de la Grossesse. These Pour le Doctorat en Medicine, (Lille), 1958. (Monograph) (French)
- Lapiccirella, V.; Abboni, F.; and Fanfani, M.: (Ballisto-cardiographic Study of Athlete's Heart; Football Players and Canoists.) Atti. Soc., Ital. Cardiol., 16:289, 1954. (Italian)
- LAPICCIRELLA, V.; and ABBONI, F.: (Electrocardiographic, Phonocardiographic and Ballistocardiographic Survey on 203 Somali Shepherds Subjected to a Strict Monunutritional Milk Diet.) Acta. Cardiol. (Brussels), 17: 178, 1962.
- LAUSON, H. D.; BLOOMFIELD, R. A.; and COURNAND, A.: The Influence of the Respiration on the Circulation in Man. Am. J. Med., 1:315, 1946.
- LEGRAND, R.; DESRUELLES, J.; MERLEN, J. F.; and DE-BACKER, G.: (Long-term Prognosis of Myocardial Infarction.) Arch. Maladies Coeur, 51:362, April, 1958.
- Legrand, R.; Merlen, J. F.; and Desruelles, J.: (Spatial Ballistocardiography.) Cardiologia (Berne), 28:318, 1956.
- Lenzi, C.; Chierici, F.; and Cussini, C.: (Theoretical and Physiological Bases for Practical Use of Ballistocardiography.) Bull. Sci. Med. (Bologna), 126(4): 422-5, 1954. (Italian)
- Lenzi, S.; Chierici, F.; Bortolotti, G. C.; and Poppi, A.: Studi di Semeiotica Balistocardiografica. Nota IV.: Variazioni Balistocardiografiche da Sforza in Soggetti con Neurosi Cardiaca. Riv. Med. (Bologna), 2:1, 1956.
- Lenzi, S.; Chierici, F.; Cussini, G.; Facci, M.; and Poppi, A.: Studi de Semeiotica Balistocardiografica. Riv. Med. (Bologna), 1:397, 1955.
- LENZI, S.; POPPI, A.; CHIERICI, F.; CUSINI, G.; and FACCI, M.: (The Normal Ballistocardiogram. II. Qualitative and Quantitative Evaluations.) Giorn. Clin. Med., 36: 287-310, 1955. (Italian)
- Letourneau, C. U.: Ballistocardiography: a New Diagnostic Test. Hospitals, 26: 92, 1952.
- Levin, S. L.; and Selinger, A. G.: The Value of Ballistocardiography in the Neuropsychiatric Hospital; a New Application of the Method. J. Nervous Mental Disease, 117: 399, 1953.
- LEVY, R. L.; BOYLE, M. N.; WEGRIA, R.; CATHCART, R. T.; and NICKERSON, J. L.: Some Effects of the Intravenous Injection of Nicotine on the Circulation in Normal Per-

- sons and in Patients with Cardiovascular Disease. Trans. Assoc. Am. Physicians, 59: 177, 1946.
- LEVY, R. L.; MATHERS, J. A. L.; MUELLER, A. A.; and NICK-ERSON, J. L.: Effects of Smoking Cigarettes on 'the Heart in Normal Persons and in Cardiac Patients. J. Am. Med. Assoc., 135: 417, 1947.
- Lewis, A. J.; and Redisch, W.: Effect of Smoking on Circulatory Measurements: Abstracts of the 29th Scientific Sessions. (New York City, N.Y.) Circulation, Vol. 16: 967, Nov. 1956.
- Lewis, H. W.; Smith DeW. H.; and Lewis, M. R.: (Ballistocardiographic Instrumentation.) Rev. Sci. Instr., 27: 835, October 1956.
- LIMCHER, A. L.: (Ballistocardiographic Examination of Patients After Myocardial Infarction and its Significance for the Expert Evaluation of Work Capacity.) Terapetv. Arkh. (Moscow) 32:48, 1960. (Russian)
- Limcher, A. L.: (Ballistocardiography in Normal Subjects and in Coronary Athersochlerosis.) Terapetv. Arkh. (Moscow), 31:24, 1959. (Russian)
- LIN-CHEN: Dinamika Ballistokardiogrammy i Elektrokardiogrammy u Bolnykh Gipertonicheskoi Bolozn'iu. (Dynamics of Ballistocardiogram and Electrocardiogram in Hypertension.) Klinich. Med., 35:124, 1957. (Russian)
- LINGEN, B. VAN; GEAR, J. H.; WHIDBORNE, J.; and LISTER, M. L.: The Ballistocardiogram in Aortic Stenosis. Am. Heart J., 47: 560-7, 1954.
- LINGEN, B. VAN; GEAR, J. H.; and WHIDBORNE, J.: Ballistocardiographic Patterns and Congestive Cardiac Failure Before and After Intravenous Administration of Digitalis. S. African J. Clin. Sci., 2: 239, 1951.
- Lingen, B. van; Lister, M.; Robinson, J.; and Elzas, B.: A Method for the Study of the Form of the High Frequency Undamped Ballistocardiogram. Am. Heart J., 51: 829, 1956.
- Lohr, H. A.; van Vollenhoven, E.; and van Rotterdam, A.: Fundamentals in Vibrocardiography. Precordial Accelerography and Acceleration Ballistocardiography. Am. Heart J., 66: 108, 1963.
- LOHR, H. A.; VAN VOLLENHOVEN, E.; and VAN ROTTERDAM, A.: (Vibrocardiography and acceleration ballistocardiography. In: Proc. of the 3rd European Symp. for Ballistocardiography, Brussels, Belgium, Apr. 16-17, 1962. p. 177.
- Longo, C.; and Sebastiani, A.: Prima Resultati di una Balistocardiografia Bidimensionale Diretta. (Direct Bidimensional Ballistocardiogram; First Reports). Cuore Circolaz. (Rome), 39(4): 193, August 1955.
- LOPEZ, R. V.; and OLALLA, S. B.: (Ballistocardiographic Studies in Chronic Constrictive Pericarditis Before and After Pericardiectomy, 4 cases.)
  Rev. Clin. Espan., 51:99, 1953. (Spanish)
- LOSNER, S.: Ballistoscope Recording with the Aid of an Asymmetrical Shutter. Am. Heart J., 47:34, 1954.
- LOSNER, SAMUEL, M. D.: The Ballistoscope: An Instrument for the Study of the Cardiac Impulse. Proc. Soc. Exper. Biol. Med., 81:1, 1952.

- LOTTI, P.; VASAALE, M.; and Leo, P.: Effetti Della Inalazione di Ossigeno sul Ballistocardiogramma Paiaologico. Rass. Fisiopatol. Clin. Terap., 28: 917, 1956.
- Lowenstein, A. S.; Arbeit, S. R.; and Rubin, I. L. Cardiac Involvement in Progressive Muscular Hystrophy. An Electrocardiographic and Ballistocardiographic Study. Am. J. Cardiol., 9: 528, 1962.
- Lubash, G. D.; Cohen, B. D.; Brailousky, D.; Brave-Man, W. S.; and Rubin, A. L.: Cardiac Aspects of Renal Disease. Am. J. Cardiol., 2: 417, 1958.
- Luca, A. de: Ballistocardiography of Atrial Origin in Total Atrioventricular Block; Case. Atti. Soc. Ital. Cardiol., 16, 293, 1954. (Italian)
- LUISADA, A. A.: Recent Advances in the Diagnosis of Rheumatic Heart Disease. Am. J. Med., 17: 781, 1954.
- LUISADA, A. A.: Diagnosis of Cardiovascular Diseases of Graphic Methods. Chicago Med. School Quarterly, 13: 49, 1952.
- LUISADA, A. A.: The Heart Beat. Graphic Methods in the Study of the Cardiac Patient. New York, Paul B. Boeber, 1954. 527 p. 273 fig., 29 tables. Also in: Circulation, 9: 474, 1954.
- LUISADA, A. A., and CONTROS, S.: On the Time Relationship of the Waves of the Ballistocardiogram. Acta Cardiol., 6:847, 1951.
- LYNN, T. N., Jr.: Ballistocardiography. J. Oklahoma Med. Assoc., 56: 265, 1963.
- Lyons, H. A.: The Ballistocardiograph in Clinical Medicine. U.S.Armed Forces Med. J., 2: 25, 1951.

## Mc

- McGregor, M.: Problems of Ballistocardiography. S. African Med. J., 31: 961, 1957.
- McGregor, M.; RAPPAPORT, M. B.; and DUFF, F.: The Ballistocardiographic Effects of Acute Vena Caval Ligation. S. African J. Med. Sci., 22: 137, 1957.
- McGuire, J.; Herwitz, G.; and Braunstein, J. R.: The Ballistocardiograms in a Free Clinics. Circulation, 6: 408, 1952.

## N

- Maggio, M: (Ballistocardiography; Review of Literature.) Riforma Med. (Naples), 67:447, 1953. (Italian)
- Magri, G.: de la Pierre, M.; Costanza, T.: (The Ballistocardiogram in Various Cardiac Defects.) Minerva Med. (Torino), 2(59-60): 205-11, 1955. (Italian)
- MAGRI, G.; DE LA PIERRE, M.; and ZAGARIA, A.: (Characteristics of Response of Oscillating Table to High Frequency; Ballistocardiographic Study.) Atti. Soc. Ital. Cardiol., 16: 284, 1954.
- Magri, G.; de la Pierre M.; Zagaria, A.: (Points on Ballistocardiographic Technic.) Minerva Cardioangiol. (Turin), 2(9-10):319-29, 1954. (Italian)
- Makinson, D. H.: Changes in the Ballistocardiogram After Exercise in Normal and Abnormal Subjects. Circulation, 2:186, 1950.

- MALAJA, L. T.: Ballistocardiographic Characteristics of Hemodynamic Disorders in Pulmonary Tuberculosis. Wien, Z. Inn. Med. 42: 185, 1961.
- Malaja, L. T.: Ballistocardiography in Patients with Pulmonary Tuberculosis. Probl. Tuberk., 37:57, 1959.
- MALAMOV, E.; and KRUSHKOV, I.: (Ballistocardiographic Changes During the Treatment of Hypertension with Hypotensive Drugs.) Surr. Med. (Sofia), 11:17, 1960.
- MALEFEKI, L. A.; RUDY, W. B.; and GILBERT, N. C.: The Use of Cristalline Visamin in the Treatment of Angina Pectoris. Circulation, 5: 851, 1952.
- Malt, R. A.: Ballistocardiogram During Paralysis With Succinylcholine. Am. Heart J., 56:245, Aug. 1958.
- Malt, R. A.: Depressant Effect of Ether on the Heart. A Study with the Ultra-low Frequency Force Ballistocardiograph. Am. Heart J., 55: 572, April 1958.
- Malt, R. A.: Effect of Preanesthetic Medication on Cardiovascular Force. Anesthesiology, 19:353, May, June, 1058
- Malt, R. A.: Effect of Pre-anesthetic Medication on Cardiovascular Force. Bureau of Med. & Surg. Research Project NM 18 03 11, Subtask 6, Report No. 3. USN Sch. of Avi. Med., Dec. 20, 1957.
- MALT, R. A.; and HARLAN, W. R.: Cardiac Function During Lipema. A Study in Force Ballistocardiography. Am. J. Med. Sci., 235: 143, Feb. 1958.
- MALT, R. A.; and HARLAN, W. R.: Cardiac Function During Lipemia. Research Project NM 18 03 11, Subtask 6, Report No. 1, USN Sch. of Avi. Med., Pensacola, Fla. Bur. Med. & Surg., July 23, 1957.
- Malt, R. A.; and Harlan, W. R.: Cardiac Function During Lipemia. Research Project NM 18 03 11, Subtask 6, Report No. 1, USN Sch. of Avi. Med., Pensacola, Fla. Bur. Med. & Surg., July 23, 1957.
- Mandelbaum, R. A.: The Ballistocardiogram in the Diagnosis of Myocarditis of Non-rheumatic Origin. Am. J. Cardiol, 3:537, April, 1959.
- Mandelbaum, R. A.; and Mandelbaum, H.: The Clinical Significance of the Lateral Plane Ballistocardiogram. N.Y. State J. Med., 57: 1409, 1957.
- Mandelbaum, H.; and Mandelbaum, R. A.: The Ballistocardiograph as a Means of Detecting Nicotine Sensitivity. *In*: 4th Inter-American Congress of Cardiology, Buenos Aires, Argentina, 1952.
- Mandelbaum, H.; and Mandelbaum, R.: (The Ballistocardiograph as a Practical Clinical Instrument.) *In:* Congress Mondial de Cardiologie, Paris, 1950.
- Mandelbaum, H.; and Mandelbaum, R. A.: Ballistocardiographic Studies in Bundle Branch Block. In: 4th Inter-American Congress of Cardiology, Buenos Aires, Argentina, 1952.
- Mandelbaum, H.; and Mandelbaum, R. A.: Clinical Findings With the Dock Ballistocardiograph. N.Y. State J. Med., 51: 1734, 1951.
- MANDELBAUM, H.; and MANDELBAUM, R. A.: Diagnostic and Prognostic Significance of the Ballistocardiogram. J. Insur. Med., 14:48, 1952.

- MANDELBAUM, H.; and MANDELBAUM, R. A.: Studies Utilizing the Portable Electromagnetic Ballistocardiogram in Normal and Persons with Heart Disease. *In:* 1st Intern. Congress of Cardiology, Vol. 1, Paris, J. B. Bailliere & Sons, 1951. p. 459
- Mandelbaum, H.; and Mandelbaum, R. A.: Studies Utilizing the Portable Electromagnetic Ballistocardiograph. I. Abnormal HIKJ Patterns in Hypertensive and Coronary Artery Heart Disease. Circulation, 3:663, 1951.
- MANDELBAUM, H.; and MANDELBAUM, R. A.: Studies Utilizing the Electromagnetic Ballistocardiograph. II. The Ballistocardiogram as a Means of Determining Nicotine Sensitivity. Circulation, 5:885, 1952.
- MANDELBAUM, H; and MANDELBAUM, R.: Studies Utilizing the Portable Electromagnetic Ballistocardiograph. IV. The Clinical Significance of Serial Ballistocardiograms Following Acute Myocardial Infarction. Circulation, 7:910, 1953.
- Mandelbaum, H.; and Mandelbaum, R. A.: Studies Utilizing the Portable Electromagnetic Ballistocardiograph. V. The Importance of the Light Exercise Test in Clinical Ballistocardiography. Circulation, 9:388, March 1954.
- Mandelbaum, Harry; and Mandelbaum, R. A.: Ballistocardiographic Studies in Patients with Probable Myocarditis. Am. Heart J., 49:661, May 1955.
- MANDELBAUM, HARRY; and MANDELBAUM, ROBERT: Ballistocardiographic Response to Nitroglycerin in Coronary Artery Disease. Am. Heart J., 44:257, 1952.
- MANDELBAUM, HARRY; and MANDELBAUM ROBERT A.: Studies Utilizing the Portable Electromagnetic Ballistocardiograph. III. The Ballistocardiogram in Bundle Branch Block. Circulation, 6:578, 1952.
- Manells, G.; and Brunner, D.: The Ballistocardiographic Patterns in Hypertension. A Correlation with the Electrographic and Retinal Changes. Israel Med. J., 20: 243, 1961.
- MANGOLD, F.: Balistographic Clinique. Helv. Med. Acta, (Berne), 22(3): 228, Aug. 1955.
- MANGUSHEV, R. I.: (Effect of Tiphen on the Ballistocardiogram in Patients with Coronary Insufficiency.) Terapetv. Arkh., (Moscow), 32:58, 1960. (Russian)
- MARCH, H. W.: Three-plane Ballistocardiography. The Effect on Age on the Longitudinal, Lateral, and Dorsoventral Ballistocardiograms. (As Recorded from Thorax). Circulation, 12:869, 1955.
- MAREEV, A. V.: (Analysis of Ballistocardiographs of Patients With Coronary Insufficiency.) Kardiologiia, 1: 54, 1961. (Russian)
- MAREEV, A. V.: (Ballistocardiographic Recording in Acute Experiments on Dogs.) Bull. Exp. Biol. & Med., 45: 102, 1958. (Russian)
- MAREEV, A. V.: (On the Role of Heart Movements in the Formation of a Systolic Ballistocardiographic Complex.) Biull. Eksp. Biol. Med., 52:13, 1961. (Russian)

- MAREEV, A. V.: (On the Role of Heart Movements in the Formation of a Systolic Ballistocardiographic Complex.) Bull. Exp. Biol. & Med., 52:1114, 1962. Translation of article in Biull. Eksp. Biol. Med., 52:13, 1961.
- MAREYEV, A. V.: See Mareev, A. V.
- MARKIEWICZ, M.: (Ballistocardiography and Electrocardiography in Chronic Anemia.) Polski Tygod. Lekar., 17:1952-1958, 1962. (Polish)
- Markiewicz, M.: (Our Studies on the Value of Ballistocardiography in the Diagnosis of Myocardial Infarction.) Polski Tygod. Lekar., 16:1108, 1961. (Polish)
- MARKIEWICZ, M.: (The Ballistocardiogram in Myocardial Infarction.) Polski Tygod. Lekar., 16:928, 1961. (Polish)
- MARKS, E.: Personal Communication; Ballistocardiographic Studies in Snuff and Tobacco Chewers. Greensboro (North Carolina), 1952.
- MARKUS, C.; NAGY, A.; and BARBU, Z.: (Ballistocardiograms, Phonocardiograms and Radiotomograms of Patients with Pulonary Diseases Preceding "Cor Pulmonale.") (Preliminary Note) Med. Intern. (Becur), 12:1851, 1960.
- MARTIN DE PRADOS, B.: (The Ballistocardiogram After Mitral Commissurotomy.) Rev. Espan. Cardiol., 9:355, Oct. 1955.
- MARTINEZ-GONZALES, M.: Ballistocardiography: Concept, Technique, Semeiology. J. Clin. Med., 18:379, 1952.
- Martinez-Gonzales, M.: (Ballistocardiographic Techniques.) Clin. Lab. (Zaragoza), 53:241, 1952.
- MARTINEZ-GONZALEZ, M.: (Body Impulses and Retropulsions Due to Circulatory Effects and Their Ballistocardiographic Expression.) Med. Espan., 27:185, 1952.
- MARTINEZ-GONZALES, M.: (Principal Ballistocardiographic Waves.) Medicina (Madrid), 20:46, 1952.
- MARTINI, G.; Rossi, P.; DE Bonis, P.; and Busnengo, E.: (Relations Between the Q-Tc and Ballistocardiogram in a Group of 100 Healthy Subjects.) Atti. Soc. Ital. Cardiol., Vol. 1:240, 1956. (Italian)
- MARUOKA, TAICHI: (Ballistocardiography; Role in Clinical Practice.) Respiration & Circulation, 5:548, 1957. (Japan)
- MASELLIS, F.; DE SIMONE, G.; and AUTERA, L.: (Analytical Study of Normal Ballistocardiograms in Rest and After Effort.) Progr. Med., Map., 10:15, 1954.
- MASELLI, F.; DE SIMONE, G.; and Cucci, C.: (Correlation Between the Electrocardiogram and the Ballistocardiogram Recorded Simultaneously and Ventricular Tension Time.) Rass. Fisiopatol., 25: 693, 1953.
- Masini, V.; and Rossi, Paolo: A New Index for Quantitative Ballistocardiography. The Velocity of Body Displacement. Circulation, 8:276, 1953.
- MASINI, V.; and Rossi, P.: Revisto Critica di Balistocardiografia Quantitativa. Cuore Circol., 37:97, 1953. (Italian)

- MASINI, V.; and Rossi, Paolo: Studies of Quantitative Ballistocardiography; The Velocity of Body Displacement in Patients with Heart Disease, Circulation, 8:381.1953.
- MASINI, V.; and Rossi, P.: (Morphology in Non-Cardiopathic Subjects Over 40 Years of Age.) Policlinico: Prat., 59:1623, 1952. (Italian)
- Masini, V.; Busnengo, E.; and Martini, G.: (Ballistocardiography in Anoxia.) Riv. Med. Aeronaut., 16:15, 1953. (Italian)
- Masini, V.; et al.: (Ballistocardiography's Experimental Study.) Atti. Soc. Ital. Cardio., 15:179, 1954. (Italian)
- MASINI, V.; FARULLA, A.; and STRANO, A.: (Ballisto-cardiogram in Atrioventricular Block.) Atti. Soc. Ital. Cardiol., 16: 296, 1954. (Italian)
- MASINI, V.; FARULLA, A.; and STRANO, A.: (Ballisto-cardiogram in Disorders of Rhythm.) Atti. Soc. Ital-Cardiol., 15:192, 1954. (Italian)
- MASINI, V.; FARULLA, A.; and STRANO, A.; (Ballistocardiography in Certain Rhythm Disorders.) Clin. Nuova (Rome), 16: 760, 1953. (Italian)
- Masini, V.; Farulla, A.; and Strano, A.: (Ballisto-cardiogram in Some Rhythmic Disorders.) Folia Cardiol. (Milan), 12:394, 1953. (Italian)
- MASINI, V.: MARTINI, G.; and Rossi, P.: (Ballistocardiographic Studies in Cardiapathies.) Riforma Med., 66: 477, 1952. (Italian)
- MASINI, V.; MARTINI, G.; and Rossi, P.: (Ballistocardiography.) Riforma Med., 66:313, 1952. (Italian)
- MASINI, V.; MARTINI G.; and Rossi, P.: (Ricerche Balistocardiografiche. II. Il Balistocardiogramma Nei Cardiopatici.) La Riforma Med., 66:466, 1952. (Italian)
- MASINI, V.; ROSSI, P.; and MARTINI, G.: (Ballistocardiographic Studies in Normal Man.) Riforma Med., 66: 396, 1952. (Italian)
- MASINI, V.; STRANO, A.; and FILOCAMO, G.: (Experimental Studies on Ballistocardiography.) Clin Nuova, (Rome), 16:759, 1953. (Italian)
- MASINI, V.; STRANO, A.; FILOCAMO, G.; MARTINI, G.; and BUSNENGO, E.: (Experimental Research in Ballisto-cardiography.) Folia Cardiol. (Milano), 12:392, 1953. (Italian)
- MASINI, V.; STRANO, A.; FILOCANO, G.; and SAPONARO, A.: (Ballistocardiogram in Experimental Lesions of Coronary Arteries.) Atti. Soc. Ital. Cardiol., 16:113, 1954. (Italian)
- MASON, R. E.: Clinical Diagnosis of Atherosclerosis of the Coronary Arteries. J. of the Am. Geriatrics Soc., 1:749, Nov. 1953.
- MASSEY, B. H.; and Husman, B. F.: Exploratory Study of Ballistocardiogram as Measure of Circulatory Fitness. Res. Quart., 27: 316, 1956.
- MASTER, A. M.; CHESKY, K.; and PORDY, L.: The Cardiovascular Examination of 200 Practicing Physicians Over the Age of 40. N.Y. State J. Med., 51: 1713, 1951.

- MASTER, A. M.; DONOSO, E.; PORDY, L.; and CHESKY, K.: The Ballistocardiogram in Peripheral Vascular Disease. Am. Heart J., 46: 180, 1953.
- MATHERS, J. A.; GRIFFEATH, H. I.; LEVY, R. L.; and NICKERSON, J. L.: Effect of Ascending an Ordinary Flight of Stairs on the Work of the Heart. Observations on Normal Individuals and on Patients With Coronary Artery Heart Disease. Circulation, 3:224, 1951.
- MATHERS, J. A. L.; NICKERSON, J. L.; FLEMING, T. C.; and PATTERSON, M. C.: Abnormal Ballistocardiographic Patterns in Cardiovascular Disease as Recorded With the Low-Frequency Critically-Damped Ballistocardiograph. Am. Heart J., 40:390, 1950.
- Mattoli, G.; Angelini, F.; Avdia, A.; and Pamini, C. F.: (Ballistocardiograph Tracings With Apparatus for Quantitative and Qualitative Response; Comparative Study.) Atti. Soc. Ital. Cardiol., 14: 395, 1953.
- MATTOLI, G.; ANGELINI, F.; AVELLA, A.; and PAMINI, C. F.:
  (Normal Ballistocardiograms and Recent Types of Recording Apparatus, Standardization of the Glennite Pick-up Precision Apparatus.) Policlinico; Prat., (Rome), 59:989, 1952. (Italian)
- Mavarof, I. L.: (Examination of Normal Subjects With the Method of Ultra-low Frequency Ballistocardiography.) Terapetv. Arkh., 34:36, 1962. (Russian)
- MAYOCK, R. L.; and Rue, E.: Insensitivity to Epinephrine in a Patient with Functioning Tumor of the Adrenal Medulla. Am. J. Med. Sci., 213: 324, 1947.
- MAYOCK, R. L., KNOOP, C. E.; RIEGEL, C.; KOUGH, N. T.; and STARR, I.: Convalescence From Surgical Procedures. III. The Relation of Nitrogen Balance and Blood Volume to Abnormalities of the Circulation. Am. J. Med. Sci., 212: 591, 1946.
- Maza, J., de la: (Ballistocardiogram and Oscillometric Curve in Study of Vascular Arteriosclerosis.) Rev. Med. Quir. Oriente (Bogota), 17-18: 257, 1954.
- Maza, J., DE LA: (Clinical Use of Ballistocardiogram.) Rev. Med. Quir. Oriente (Bogota), 15-16:189, 1954.
- Maza, J. H., de la: Significacion Clinica del Complejo en 'M' del Balistocardiograma. Rev. Med. Quir. Oriente, 17:15, 1956.
- Medved, R.: Balistokardiografija Lijencnicki. Vjesnik (Zagreb), 77:300, 1955.
- MEDVED, R.; and HORVAT, V.: (Ballistocardiograms of Athletes) Deut. Med. Wochenschr. (Stuttgart), 81:780-83 May 18, 1956. (German)
- MEJIA, R. H.; GOMEZ, O. AL; and TANTURI, C. A.: (The Ballistocardiogram of the Normal Dog.) Rev. Argent. Cardiol., 24:187-195, 1957. (Spanish) (Summary in English) English Translation by NASA as NASA-TT-G-8536, Sept. 1963.
- Mena, S. A.: Balistocardiografia Clinica, M. V. Fresneda, La Habana (Cuba), 1955, 333 p.
- MENDLOWITZ, M.; SCHAUER, G.; and GROSS, L.: Hemodynamic Studies in Experimental Coronary Occlusion. II. Closed Chest Experiments. Am. Heart J. 13:664, 1937.

- Meneses Hoyes, J.: (The Ballistocardiogram in Arterial Hypertension and Aortic Insufficiency.) Angeiologie Et Annales De La Societe Française D'Angeiologie Et D'Histopathologie 7: 19, 1955. (French)
- MENESES HOYES, J.: (The Ballistocardiogram in Mitral Valvulitis.) Med. Rev. Mex., 41:265, 1961. (Spanish)
- MENESES HOYES, J.: Mecanismo de Produccion de las Ondas del Balistocardiograma y su Significacion en Los Estados Fisiologicas y Patologicos. (Mechanism of Production of Ballistocardiogram Waves and Their Significance in Physiological and Pathological States.) Med., Mex., 38: 353, Aug., 1958.
- Meneses, Hoyes, J.: Mecanismo de Produccion de las Ondas del Balistocardiograma y su Significacion en Los Estados Fisiologicos y Pato Logicos. (Mechanisms of Production of Ballistocardiographic Waves and Its Importance in Physiological and Pathological States.) Med., Mex., 38: 335, July, 1958.
- MERCADER, R. C.: and MARTINEZ-GONZALES, M: Expresion Balistocardiografica de las Extrasistoles. Clin. Lab. (Zaragoza), 61 (363): 416, June, 1956.
- MEBLEN; CHEVAT; COSTET; EDOUARD; and BOUCHEAU: (Ballistocardiograms in Pilots of Jet Planes.) Med. Aeron., (Paris), 10:79-86, 1955. (French)
- Merlen, J. F.: Balistocardiographie et Chirurgie Thoracique. Strasbourg Med., 9:17, 1958.
- MERLEN, J. F.: (Ballistocardiography. What the Physician May Expect of It.) Concours. Med. (Paris), 82: 1625, 1960. (French)
- Merlen, J. F.: (Practical Value of Ballistocardiography) Med. Welt. (Stuttgart), 45:1657-9, Nov. 9, 1957. (German)
- MERLEN, J. F.: Valeur Pratique de la Balistocardiographie. Concours Med. (Paris), 76:4089, 1954.
- MERLEN, J. F.; and DESRUELLES, J.: La Balistocardiographie (Valeur Pratique). Expan. Sci. Francaise, 1956. (Monograph) (French)
- MERLEN, J. F.; CHEVAT, H.; and CACHERA, J. P.: (Shock of the Cardiac Apex and Movement of the Thoracic Wall.) Arch. Maladies Coeur, 49:1029, 1956. (French)
- MERLEN, J. F.; CHEVAT, H.; CACHERA, J. P.; and BOUCHEAU, P.: Le Balistogramme des Sportifs de Competition. France Med., 17: 11, 1954.
- Merlen, J. F.; Desruelles, J.; and Cachera, J. P.: Valore Pratico Della Balistocardiografia. Cardiol. Prat., 8:197, 1957.
- MERLEN, J. F.; TILMANT, J.; and VANRAPENBUSCH, R.: (Basic Principles of Ballistocardiography.) C. Rend. Soc. Biol., 146: 1191, 1952. (French) (Abstract)
- MERLEN, J. F.; URZAY, V.; and Alonso, L.: Effets du Coallapsus Pulmonaire sur le Balistocardiogramme. Arch. Maladies Coeur, 12: 1026, 1954.
- MERLEN, J. F.; URZAY, B.; and CACHERA, J. P.: (Ballisto-cardiogram During Extrasystolic Arrhythmia.) Echo Med. Du Nord (Lille), 26: 294, 1955. (French)

- MERLEN, J. F.; URZAY, V.; and CACHERA, J. P.: Le Ballistocardiogramme au Cours de l'Arythmie Extrasystolique. Arch. de Enferm. Corazon Vasos, 57: 3, 1954.
- MERLEN, J. F.; URZAY, V.; et al.: (La Balistografia.) Rev. Espan. de Cardiologia, 8:15, 1954.
- MERLEN, J. F.; VANRAPENBUSCH, R.; and CACHERA, J. P.: (Ballistocardiogram and Rheogram in Light of the Hemodynamic Theory.) Arch. Maladies Coeur, 46: 1038, 1954. (French)
- MERLEN, J. F.; VANRAPENBUSCH, R.; and CACHERA, J. P.: La Rheocardiographie. Presse Med., 61:1251, 1954.
- MERLEN, J. F.; VANRAPENBUSCH, R.; and CACHERA, J. P.: (Evaluation of Ballistocardiography and Rheocardiography From Viewpoint of Theoretic Hemodynamics.) Arch. Maladies Coeur, 46: 1038, 1953. (French)
- MERLEN, J. F.; VANRAPENBUSCH, R.; and CACHEBA, J. P.: (Morphology of the Ballistocardiogram; Criticism of its Diagnostic Value.) Arch. Maladies Coeur, 46: 928, 1953. (French)
- MIASNIKOW, A. L.: Diagnostic and Pathogenic Borderlines Between Hypertensive Disease and Atherosclerosis. Am. J. Cardiol, 4: 692, 1959.
- Mihoczy, L.: (Clinical Use of Ballistocardiography.) Orv. Hetil, 103: 539, 1962.
- MIHOCZY, L.: (On the Relationship of the Pressure Rate in the Lesser Circulation With the K & L Waves of the Ballistocardiogram.) Cardiologia (Berne), 37:98, 1960.
- Mihoczy, L.: (Relationship Between the Pressure in the Lesser Circulation and the K and L Waves in Ballistocardiography.) Magy. Belorv. Arch., 13:85, 1960. (Hungarian)
- Mihoczy, L.: Sur la Valeur Clinique de la Balistographie Qualitative. Proceedings of the Third European Symposium for Ballistocardiography Held at Brussels (Belgium), p. 186, April 16-17, 1962.
- MIHOCZY, L.: (The Use of Ballistocardiography in Clinical Practice. II. Qualitative Ballistocardiography) Orv. Hetil., 104: 247-250, 1963. (Hungarian)
- Mihoczy, L.; and Varkonyi, G.: (Ballistocardiography in Pulmonary Tuberculosis.) Orv. Hetil., 97: 901, 1956.
- MIHOCZY, V. L.; and VARKONYI, G.: Ballistokardiographische Untresuchungen an Lungenkranken. Z. Kreislaufforsch., 45: 764, 1956.
- MINELLA, A. C.: Ballistocardiography in Office Practice. Ohio Med. J., 50: 1145, 1954.
- MING-HSIN, H.; and KUO-JUEI, Y.: (Ballistocardiographic Changes in Rheumatic Mitral Valvular Disease.) Chinese Med. J., 75: 693, 1957.
- MISPIRETA, A.; CORVACHO, A.; ESCUDERO, M.; and GOYZUETA, L.: Characteristics of the Ballistocardiogram in Persistent Patent Ductus Arteriosus. *In*: 2d World Congress of Cardiology, Wash., D.C., Sept. 1954.
- MIYAHARA, KISHITIRO: (On the Fundamental Experiment of the So-Called "Ballistocardiogram") Igaku Kenkyuu, 20:104, 1950. (Japanese)

- MOLOMUT, N.; and ALLEN, S. C.: Effect of Pressure Breathing on Circulation at High Altitude as Measured by the Ballistocardiograph. J. Avia. Med., 17: 357, 1946.
- Montoreano, F.: (Ballistocardiographic Control of Sensitivity to Tobacco in Duodenal Ulcer Without Cardiovascular Lesions.) Prensa Med. Argent., 43: 2557, 1956. (Spanish)
- Montoreano, F.; and Rabenko, J.: Control Balistocardiografico de la Sensibilidad al Tabaco en Cancerosos Pulmonares de Edad Avanzada. (Ballistocardiographic Control of Sensitivity to Tobacco in Lung Cancer Patients of Advanced Age) Rev. Med. Argent., 71: 208, July 1957.
- Montoye, H. J.; Collings, W. D.; and Stauffer, G. C.: Effects of Conditioning on the Ballistocardiogram of College Basketball Players. J. Appl. Physiol., 15:449, 1960.
- Moon, D.; MINEUR, H. J.; HOPPER, G. R.; and SCHWARTZ, S. H.: Ballistocardiographic Studies of Ethaverine as a Coronary Vasodilator; Preliminary Report. J. Med. Soc. (New Jersey), 51:17, 1954.
- MOREIRA, M. G.: (Contribution to the Experimental Study of the Variations in the Amplitude of the H.I. and J Waves in the Ballistocardiogram.) Thesis, Univ. of Porto Sch. of Med., Porto, Portugal, Sept. 1960. (In Portuguese) English Translation by U.S. Joint Publications Res. Serv., Wash., D.C. as JPRS R-1995-D/A, 1962; FAA 2-6114-1.
- Moreira, M. G.; and Azevedo, S.: Repercussão Balistocardiografica da Administraçoa Mtravenosa de Pentobarbital Sodico no Cãa. Med. Contemp. (Lisbon), 80: 29, 1962.
- Moreira, M. G.; and Azevedo, S. G.: Repercussão Balistocardiográfica da Administração Intravenosa de Pentobarbital Sódico no Cão. Separata Med Contemp. (Lisbon), 80:29, 1962. (Original in Portuguese; Summary in English.)
- Moreira, M. G.; and de Freitas, A. F.: (Ballistocardiographic Changes Produced in Dogs by Intravenous Injection of Quinidine Sulfate.) Med. Contemp. (Lisbon), 79:455, 1961. English Translation by NASA as NASA-TT-F-8544, Nov. 1963.
- Moret, P.; Arbeit, S. R.; et al.: (Ballistocardiographic Study of Mitral Valvular Disease.) Cardiologia (Berne), 31:123, 1957.
- Moret, P. R.: The Ballistocardiogram in Mitral Valvular Disease. Am. J. of Cardiol., 3:794, June, 1959.
- Moret, P. R.; and Duchosal, P. W.: Quelques Principes Nouveaux d'Hemodynamique sur l'Interdependance Cardioaortique. Acta Cardiol., 15:463, 1960.
- Morris, G. L.; and Braunstein, J. R.: A Study in Frontal Plane Vectorballistocardiography. Circulation, 12: 432, 1955.
- Morris, G. L.; and Braunstein, J. R.: A Two Dimensional Ballistocardiographic Study of 59 Apparently Normal Persons; an Analysis of the IJ Segment as it Relates to Body Surface Area and the Anatomical position of the Heart. Circulation, 11:767, 1955.

- Morris, G. L.; and Singer, M. I.: A Two-Dimensional Ballistocardiographic Study of the Relation of Body Size to Ballistic Amplitude in Children. Circulation, 13: 592, 1956.
- Morris, G. M.: A Review of Ballistocardiography. J. Am. Med. Women Assoc., 9: 391, 1954.
- Morse, R. L.: Ballistocardiographic Analysis Utilizing a Mathematical Model and Photoelectric Analog. BuMed Project MR005.13-7004 Subtask 6, Report No. 10. Pensacola, Fla.: Naval School of Aviation Medicine, 17 July, 1963.
- Morse, R. L.: Significant Physiological Parameters of the Ballistocardiogram as Analyzed by a Mathematical Model. BuMed Project MR005.13-7004 Subtask 6, Report No. 11, Pensacola, Fla., Naval School of Aviation Medicine, January 8, 1964.
- Moser, M. et al.: The Ballistocardiogram in Myocardial Infarction. A Study of 100 Cases. Circulation, 6:402-7, Sept. 1952.
- Moss, A. J.: Ballistocardiographic Evaluation of the Cardiovascular Aging Process. Circulation, 23:634, 1961.
- Moss, A. J.: The Ballistocardiographic Evaluation of the Cardiovascular Aging Process in Overly Healthy Males Aged 18-54. Project MR005.13-7004 (formerly NM-18-03-11); Subtask 6, Rept. No. 7, Sch. of Aviation Med., Pensacola, Fla., 1959.
- Moss, A. J.: A Ballistocardiographic Study of Left Bundle Branch Block. U.S. Naval School Aviat. Med. Res., MR005 13-7004, Jan. 15, 1960.
- Moss, A. J.: Cardiac Stroke Power Consumed in the Ascending Aorta. Proc. Ballistocardiograph Res. Soc., Atlantic City, (N.J.), April 27, 1963. Am. J. Cardiol., 12: 579, 1963. (Abstract)
- Moss, A. J.: The Effect of Hypoxia on the Rate at Which the Cardiac Ejection Force is Generated: a Ballistocardiographic Study. Am. Heart J., 59:412, 1960.
- Moss, A. J.: Ischemic Heart Disease and Accelerated Cardiovascular Aging; a Ballistocardiographic Study. Circulation, 25: 369, 1962.
- Moss, A. J.; and Bradley, B. E.: Ballistocardiographic Responses to Hyperthermia. J. Appl. Physiol., 15:445, 1960.
- Moss, A. J.; and Bradley, B. E.: The Ballistocardiographic Response to Hyperthermia. U.S. Nav. Sch. Avia. Med. Res., Report MR005 13-7004, 1959.
- Mosso, H. E.: (Ballistocardiography.) Prensa Med. Argent., 40:2679, 1953. (Spanish)
- Mosso, H. E.; Bas Fagueroa, C; M Campos, A.; and Boverini, A. H.: El Balistocardiograma en las Cardiopatias Congenitas. (Ballistocardiogram in Congenital Heart Disease.) Prensa Med. Argentina, 45:2487, 11 July, 1958.
- Mosso, H. E.: (Electrocardiography and Ballistocardiography.) Medicina, (Buenos Aires), 13:124, 1953. (Spanish)
- Mosso H. E.; 1. (Semiology of the Normal Ballistocardiogram.) Prensa Med. Argentina, 42:515, 1955. (Spanish)

- Mosso, H. E.: (II. Semiology of the Pathological Ballistocardiogram.) Prensa Med. Argentina, 42:599-603, 1955. (Spanish)
- Mounsey, J. P. D.: Local Precordial Ballistocardiograms. In: 2nd European Conference of Cardiology, Stockholm, 1956.
- Mounsey, P.: Praecordial Ballistocardiography. Brit. Heart J., 19: 259, 1957.
- Muiesan, G.; and Rossi, F.: Il Balistocardiogramma nelle Nefropatie Mediche. (Ballistocardiograms in Medical Nephropathy.) Minerva Cardioangiol. (Turin), 5:213.1957. (Italian)
- Muresan, G.; and Rossi, F.: (Ballistocardiograms in Medical Nephropathy.) Minerva Cardioangiol., (Turin), 5:213, 1957. (Italian)
- Murphy, R. A. Jr.: Ballistocardiographic Patterns in Intraluminal Aortic Obstructions. Am. Heart J., 39: 174, 1950.
- Mussini, M.: Sulla Variabilitia Respiratoria del Tratto IJ de Balistocardiogramma. (Respiratory Changes of the IJ Stroke of the Ballistocardiogram.) Cuore and Circol., 42: 230, 1958. (Italian)
- Mussini, M.; and Constantini, L.: (Ballistocardiogram in Collapse Therapy of Pulmonary Tuberculosis.) Riv. Pat. Clin. Tuberc., 27:193, 1954. (Italian)
- Mussini, M.; and Constantini, L.: (Ballistocardiogram in Collapse Therapy of Pulmonary Tuberculosis by Thoracoplasty.) Riv. Pat. Clin. Tuberc., 27:65, 1954. (Italian)

#### N

- NAKAMURA, K.: (A Ballistocardiographic Study. Report 2: Ballistocardiograms in Hypertension and Hypotension) Respiration & Circulation, 8:891, 1960. (Japanese).
- NAKAMURA, K.: (Study on Ballistocardiogram.) Hirosaki Med. J., 12: 766, 1961. (Japanese) English Translation by NASA, Washington, D.C., as NASA-TT-F-8471, July 1963. English Translation includes "Technical Appendix" by Hago Onodera, M.D., not present in the original.
- Namba, H.; and Kozawa, S.: (A Ballistocardiographic Study of 60 Apparently Normal Subjects) Osaka Daigaku Zassi, 6:105, 1953. (Japanese)
- Namba, H.; Kozawa, S.; and Fujigaki, H.: (Studies on Vector Ballistocardiogram in Normal Persons. [Preliminary Report.]) Med. J. Osaka Univ., 5: 565, 1954.
- NAVARRO, V. R.: Action of Certain Drugs on the Ballistocardiogram of Normal Subjects and on Various Pathological Conditions. *In:* 4th Inter-American Congress of Cardiology, Buenos Aires, Argentina, 1952.
- NAVARRO, V. R.: (Effect of Phentolamine [Imidazole Derivative], Electrocardiograph and Ballistocardiograph of Group Hypertensive Patients.) Rev. Argent. Cardiol., 20:17, 1953. (Spanish)
- NEELY, W. A.; WILSON, C. F., JR.; MILNOR, J. P.; HARDY, J. D.; and WILSON, H.: Cardiac Output: a Clinical Comparison of the Direct Fick, Dye and Ballistocardiographic Methods. Surgery, 35:22, 1954.

- NEGRE, E.; and THEVENET A.: Coarctation avec Hypoplasie de l'aorte Thoracigne Descendante en Anamalie veineuse (Veine Cave Superieure et Azygos Gauches). (Coarctation with Hypoplasie of the Descending Thoracic Aorta and Venous Anomaly (Superior Vena Cava and Left Azygos) Arch. Maladie Coeur, 51:786, 1958.
- Newman, M. M.; Bay, E. B.; and Adams, W. C.: Ballistocardiography in Experimental Mitral Insufficiency. Am. J. Physiol., 165: 497, 1951.
- NICKERSON, F.; NEMHAUSER, G.; CANNON, C.; GREENMAN, J.; SATZMAN, R.: Resonant Frequencies of Internal Body Structures. Federation Proc., 20:215, 1961.
- NICKERSON, J. L.: (Ballistocardiography.) In: Congres Mondial de Cardiologie. Paris, 1950.
- Nickerson, J. L.: Ballistocardiography, *In:* Medical Physics, Vol. II p. 222. Chicago, Ill., Year Book Publishers, 1950.
- Nickerson, J. L.: The Beating of the Empty Heart. Am. J. Cardiol., 1:532-533, 1958 (Abstract).
- Nickerson, J. L.: Cardiac Output by Ballistic Method. Chicago Med. Sch. Quart., 21:115, 1961.
- NICKERSON, J. L.: Determination or Cardiac Output in Dog by the Ballistic Method. Federation Proc., 5:76, 1946.
- Nickerson, J. L.: Estimation of Stroke Volume by Means of the Ballistocardiograph. Am. J. Cardiol., 2:642, 1958
- Nickerson, J. L.: Studies on the Natural Frequency and Damping of Internal Organs in Relation to the Origin of the Whole Body Ballistocardiogram. *In:* Proc. Ballistocardiograph Res. Soc., Atlantic City, N.J., April 27, 1963. Also in: Am. J. Cardiol., 12: 580, 1963 (Abstract).
- NICKERSON, J. L.: Symposium on Cardiac Output. The Low-frequency Critically Damped Ballistocardiograph. Federation Proc. 4:201, 1945.
- NICKERSON, J. L.; and CURTIS, H. J.: The Design of the Ballistocardiograph. Am. J. of Physiol., 142:1, 1944.
- Nickerson, J. L.; and Mathers, J. A.: A Study of the Physical Properties of the Ballistocardiograph, Am. Heart J., 47:1, 1954.
- NICKERSON, J. L.; and MATHERS, J. A. L.: The Ballistocardiograph: Study of the Different Types of Apparatus. The First International Congress of Cardiology, 1:468, 1951. Paris, J. B. Bailliere & Sons.
- Nickerson, J. L.; Elin, D. C.; and Warren, J. V.: The Effect of Temporary Occlusion of Arteriovenous Fistulas on Heart Rate, Stroke Volume and Cardiac Output. J. Clin. Invest., 30: 215, 1951.
- NICKERSON, J. L.; HUMPHREYS, G. H.; DETERLING, R. A.; FLEMING, T. C.; and MATHERS, J. A. L.: Diagnosis of Coarctation of the Aorta with the Aid of the Low-Frequency Bed Critically Damped Ballistocardiographs. Circulation I: 1032, 1950 (Part 2).
- Nickerson, J. L.; Warren, J. V.; and Brannon, E. S.: The Cardiac Output in Man, Studies with the Low Frequency, Critically Damped Ballistocardiograph, and the Method of Right Atrial Catheterization. J. Clin. Invest., 26:1, 1947.

- NICKERSON, JOHN L.: Some Observations on the Ballistocardiographic Pattern, with Special Reference to the H and K Waves. J. Clin. Invest., 28: 369, 1949.
- Nigro, G.: Su un Caso di Situs Inversus Viscerum. Minerva Cardioanglio. (Torino), 4:674, 1956.
- Nigro, G.; and Pacillo, G.: (The Ballistocardiogram in Subjects with Pulmonary Agenesis and in Subjects Subjected to Pneumonectomy.) Arch. Tisiol. (Naples) 14: 1263, 1959.
- Nigro, G.; D'Alessandro, L.; et al.: Valutazione Balistocardiografia dell Cardiopatic Ipocinetiche ed Ipercinetiche. Gior It Chir. (Naples), 15:549, 1959.
- NITSCHKOFF, S.: (Limitations and Clinical Significance of Ballistocardiography.) Deut. Gesunheitsw., 15:1709, 1960. (German)
- Noder, W.: Die Ballistocardiographie. Med. Klin. (Berlin), 51(20): 861, May 1956.
- Noordergraaf, A.: Development of an Analog Computer for the Human Systemic Circulatory System. In: Proc. of the Symp. on "The Development of Analog Computers in the Study of the Mammalian Circulatory System," "Woudschoten" Zeist, The Netherlands, April 19-20, 1962. Printed in: Circulatory Analog Computers (Edited by A. Noordergraaf, G. N. Jager, and N. Westerhof), Amsterdam, North-Holland Publishing Co., 1963, p. 29.
- Noordergraaf, A.: Evaluation of the Human Longitudinal Ballistocardiogram from the Changing Blood Distribution. Abstract of Papers Presented at Biophysical Society Meeting, Cambridge, Mass., Feb. 1958.
- Noordergraaf, A.: Further Studies of the Ballistocardiogram. Circulation, 23:413, 1961.
- Noordergraff, A.: Neue Wege in der Herz and Kreislaufforschung. Berlin. Med., 11:1, 1960.
- NOORDEBGRAAF, A.: Physical Aspects of the "Direct Recording of Body Displacement Velocity and Acceleration by Shin-bar Ballistocardiographs. Circulation, 23:426, 1961.
- Noordergraaf, A.: Physical Basis of Ballistocardiography. Thesis, Univ. of Utrecht, The Netherlands, 1956. (In English)
- Noordergraaf, A.: The Prediction of the Ballistocardiogram from Physiological and Anatomical Data. *In:* Second European Congress of Cardiology, Stockholm, 1956.
- NOORDERGRAAF, A.; and HEYNEKAMP, C. E.: Genesis of Displacement of the Human Longitudinal Ballistocardiogram From the Changing Blood Distribution. Am. J. Cardiol., 2:748, Dec. 1958.
- NOORDERGRAAF, A.; and HOREMAN, H. W.: The Prediction of the Ballistocardiogram from Physiological and Anatomical Data. Cardiologia (Basle), 31:416, 1957.
- Noordergraaf, A.; and Speir, D. H.: A New Method for the Elimination of the Respiratory Effect in Ultralow Frequency Displacement and Velocity Ballistocardiograms. In: Proc. of the 3rd European Symposium for Ballistocardiography, Brussels, Belgium, April 16-17, 1962. p. 142

- Noordergraaf, A.; Horeman, H. W.; Ten Holt, S. P.; and Van Domgen, R.: Predictions of the Human Ballistocardiogram From a Plethysmographic Viewpoint. Am. J. Cardiol., 1:531, 1958. (Abstract)
- Noordergraaf, A.; Horeman, H. W.; Ten Holt, S. P.; and Van Dongen, R.: Numerical Evaluation of Volume Pulsations in Man. IV. The Calculation of the Human Ballistocardiogram. Phys. Med. Biol. (London), 3:349, 1959.
- Noordeberraf, A.; Jager, G. N.; and Westerhof, N.; eds.: Circulatory Analog Computers. Amsterdam, North-Holland Pub. Co., 1963. (Proc. of the "Symp. on the Development of Analog Computers in the Study of the Mammalian Circulatory System", "Woudschoten", Zeist, The Netherlands, Apr. 19-20, 1962.
- Noordergraff, A.; Verdouw, P. D.; and Boom, B. K.: The Use of An Analog Computer in a Circulation Model. Progr. Cardiovascular Diseases, 5:419, 1963. Reprinted in: Medical Electronics in Cardiovascular Disease. New York, Grune & Stratton, 1963. p. 84
- Nowak-Reszel, I.; and Stasinski, T.: Electro- and Ballistocardiographic Picture and Behavior of Electrolytes in Atherosclerosis of the Coronary Vessels. Polskie Arch. Med. Wewnetrznej, 30:1013. 1960. (Polish)
- NYBOER, J.: Comparison of Ultra-Frequency and Direct Ballistocardiograms. Harper Hosp. Bull., 16:90, 1958.
- NYBOER, J.: III. Constant Mass Ultra-Frequency Ballistocardiograms. Family Series. Harper Hosp. Bull., 16: 92, 1958.
- Nyboer, J.; and van Orden, L.: Constant Mass Low-Frequency Ballistocardiography. Federation Proc., 16:96, 1957.
- Nyboer, J.; and Watson, T. R. Jr.: Constant Mass Displacement Ballistocardiography and Electrical Impedance Plethysmography. J. of Lab. Clin. Med., 46:270, 1955
- Nyboer, J.; and Willard, R.: Initial UF-BCG Complexes in Major Arterial Obstruction. Harper Hosp. Bull., 16: 85, 1958.

0

- Ogawa, S.: (Formula for Use in Ballistocardiogram Determination of Basal Metabolism and Formula for Use in Ballistocardiogram Determination of Cardiac Function.) Fukuoka Act. Med., 48:1155, 1957. (Japanese)
- OKA, M.; and SAVOLA, P.: (The Detection of Early Heart Disease by Ballistocardiogram in Diabetes Mellitus. Studies in Patients Under 40 years of Age.) Cardiologia (Basle), 38:279, 1961.
- OLALLIA, S. B.; SALINAS, J. L. M.; and GARCIA, L. F. C.: Estudios Balistocardiograficos pre y Postoperatorios en la Cirugia Toracopulmonar. Rev. Clin. Esp., 59:400, 1955.
- OLEJNICZAK, P.; JAZIENICKI, N.; ROZWADOWSKA-DOW-ZENKA, M.; and STASINSKI, T.: Stan Maczin Krivionosnych w Cukrzycy Wedling Badan Balistokardiograficznych. (Status of Blood Vessels in Diabetes Based on Ballistocardiographic Tests.) Polskie Arch. Med. Wewnetrznej, 28: 746, 1958. (Polish)

- Oranskiy, I. Ye.: (Accelerometric Precordial Ballistocardiogram [Kinetocardiogram] in Hypertension.) Terapevt. Arkhiv., 34:27, 1962. (Russian) English Translation by NASA as NASA-TT-F-198, Feb. 1964.
- Oranskiy, I. Ye.: (Accelerometric Precordial Ballistocardiogram (Kinetocardiogram) in Normal Subject (On a Possibility of Determining the Phasic Structure of Cardiac Contractions).) Terapevt. Arkh., 33:65, 1961. (Russian)
- Oranskiy, I. Ye.: (Ballistocardiography in Hypertension.) Klinich. Med., (Moscow), 38:39, 1960. (Russian)
- Oranskiy, I. Ye.: (On Comparative Evaluation of Function Tests in the Diagnosis of Coronary Sclerosis in Patients with Hypertension According to Ballistocardiographic Data.) Terapevt. Arkh., 32:61, 1960. (Russian)
- Oranskiy, I. Ye.; and Smirnov, N. F.: (Technic of Rapid Ballistocardiographic Registration.) Biull. Eksp. Biol. Med., 47: 123, 1959. (Russian)
- Orlov, L. L.: (Ballistocardiography.) Soviet Med., 23: 34, 1959. (Russian)
- Ostrowski, K.; and Serzysko, W.: Zachowanie sie Krzywej Balistokardiografieznej po Wysilku u Chorych ze Wzgledna Niewydolnoscia Krazenia. Polskie. Tygod. Lekar., 14:665, 1959.
- OTIS, A. B.; and RAHN, H.; BRONTMAN, M.; MULLINS, L. J.; and FENN, W. O.: Ballistocardiographic Study of Changes in Cardiac Output Due to Respiration. J. Clin. Invest., 25:413, 1946.

## P

- Paddu, V.: (Simple Technic For Obtaining Ballistocardio-(gram.) Cuore e Circol., 35:334, 1951. (Italian)
- Padula, F.: (Electrocardiographical and Ballistocardiographical Studies in Sulfuric Mud Therapy.) Minerva Med. (Turin), 46(87):1172; Oct. 1955. (Italian)
- Paine, P. M.; and Shock, N. W.: The Variability of Cardiac Output Estimations Made with the High-frequency Undamped Ballistocardiograph. Circulation, 1:1026, 1950.
- Pani, A.: (Ballistocardiogram Immediately and Before and After Labor at Term. Contribution to the Study of Ballistocardiographical Terminal Complex.) Minerva Cardioangiol., 8:451, 1960. (Italian)
- Pani, A.: Systolic Complex and Diastolic Complex of the Ballistocardiogram. Analytic Study and Proposal of Different Terminology. Minerva Cardioangiol., 8:392, 1960. (Italian)
- Paparopoli, G.; and Terranova, S.: Clinical and Instrumental Data on the Cardiovascular System in Subjects with Petit Saturnism. Folio Med. (Naples), 38(10); 1080, Oct. 1955. (Italian)
- Papper, E. M.; and Bradley, S. E.: Hemodynamic Effects of Intravenous Morphine and Pentothal Sodium. J. of Pharacol. & Exper. Therap., 74: 319, 1941.
- Parin, V. V.: (Ballistocardiography; Clinical Significance.) Klin. Med., 34:12, 1956. (Russian)

- Pabin, V. V.; and Mareev, A. V.: (Technic of Registration in Ballistocardiography.) Terapevt. Arkh. (Moscow). 28(2):19, 1956. (Russian)
- Penneys, R.: Effect of Induced Anoxemia on the Ballistocardiogram. Am. J. Cardiol., 8:302, 1961. (Abstract)
- Penneys, R.: The Induced Anoxemia Test for Coronary Artery Disease with Oximeter Control. The Penn. Med. J., 58: 916, 1955.
- Perier, R.; and Rozzo di Borgo, J.: (Ballistocardiography.) Presse Med., 62:684, 1954. (French)
- Perls, T. A.; and Kissinger, C. W.: An Integrating and Differentiating Bar-magnet Velocity Meter for Use in Ballistocardiography. Nat. Bur. St. Report #2733, Sept., 1953.
- Perosa, L.; Colonna, L.; et al.: Il Metabolosmo Idricosalino nella Stasi Venosa. Cuore e Circol., 39:3, 217, 1955.
- Perosa, L.; Manganelli, G.; et al.: I Fattori Emodinanici Efficienti sulla Diuresi. Cuore e Circol., 39: 3, 147, 1955.
- Perretta, A.; Baldi, E. M.; and Gotbeter, J.: (The Ballistocardiogram in Processes that Raise Intra-abdominal Pressure.) Prensa Med. Arg., 48:1453, 1961. (Spanish)
- Pescapor, L.: (The Alternant Ballistocardiogram.) Atti. Soc. Ital. Cardiol, 21:481, 1959. (Italian)
- Pescador, L.: (Clinical Significance of Ballistocardiography in the Study of Cardiac Insufficiency.) Rev. Clin. Espan. (Madrid), 54(6): 329-33, 1954. (Spanish)
- PESCADOR, L.; MARTIN DE PRADOS B.; and SAINZ, V.: Ballistocardiographic Pulsus Alternans. Cardiologia, (Basil), 26:121-6, 1955. (French)
- Pescapor, L.; Martin de Prados, B.; and Sainz, V.; (Human Ballistocardiogram: Its Mechanisms and Significance.) Rev. Clin. Espan., 51:223, 1953. (Spanish)
- Pestel, C. V.; and Marbarger, J. P.: A Pickup and Amplifier for the Ballistocardiograph. J. Avia. Med. 22: 156. 1951.
- PHALTSES, S. G.; (Disorders of the Circulatory System in Patients with Hepatic Insufficiency) Hellen. Iatr., 32:188-193, 1963. (German)
- PHIBBS, B.: Factors in Fidelity of ULF BCG System: Possible Significance of High-frequency Response. *In:*Proc. Ballistocardiograph Res. Soc., Atlantic City, N.J.,
  April 27, 1963. Also in Am. J. Cardiol., 12:581, 1963.
  (Abstract)
- Pierce, J. R.; Christianson, L.; and Walker, R. P.: Time Relationships of Ballistocardiographic Movements. Am. Heart J. 46: 329, 1953.
- Pierre, M. de la,; Gamna, G.; and Pinna, Pintor, P.: (Modification Induced by the Administration of Nitroglycerin in the Ballistocardiogram and their Diagnostic Value.) Minerva Med. (Turin), 47(34): 1303-10, April, 1956. (Italian)
- Pierre, M. de la; and Levi, V.: (Diagnostic Value of the Ballistocardiogram in Aortic Stenosis and Abnormalities). Minerva Cardioangiol., 4(4):253, 1956. (Italian)

- Podio, R. B.: (Methods of Analysis and Synthesis in Various Procedures of Cardiovascular Exploration.) Rev. Med. Cordoba, 43: 1-8, 1955. (Spanish)
- Pollock, P.: Ballistocardiography: A Clinical Review. The Can. Med. Assoc. J., 75: 778, 1957.
- Pollock, P.; Harmel, H.; and Clark, R. E.: Estimation of Cardiac Output by the Ballistocardiograph During Thiopental-nitrous Oxide-oxygen Anesthesia. Anesthesiology, 16:970, Nov. 1955.
- Ponfilov, IuA.: (On Interrelations in the Type of Electrocardiogram and Change in the Ballistocardiogram in Patients with Chronic Lung Diseases.) Terapeut. Arkh. (Moscow), 33:49, 1961.
- POPPI, A.; FACCI, M.; and MARTINELLI, M.: (Limitations of Current Diagnostic Use of Ballistocardiography.) Bull. Sci. Med. (Bologna), 126: 422, 1954. (Italian)
- POPPI, A.; LENZI, S.; FACCI, M.; CISSINI, G.; and CHIERICI, F.: (Evaluation of the Normal Ballistocardiogram 1. Recordings of Displacement and Velocity.) Giorn. Clin. Med. (Parma), 36:1-34, 1955. (Italian)
- PORDY, L.: Cardiac Diagnostic Methods in Coronary Artery Disease: Electrocardiogram, 2-Step Exercise Test and Ballistocardiogram. Diseases of the Chest, (Chicago), 27(3): 255-62, 1955.
- PORDY, L.: Clinical Evaluation of the Tobacco Ballistocardiogram. Bull. N. Y. Acad. Med., 31:415, 1954.
- PORDY, L.; and CHESKY, K.: The Influence of Instrumentation and Respiration on the Ballistocardiogram. Trans. Am. Coll. Cardiol., 2:190, 1952.
- PORDY, L.; and others. Scientific Exhibit: Clinical Ballistocardiography. Postgrad. Med., 11:560, 1952.
- PORDY, L.; CHESKY, K.; MASTER, A. M.; TAYMOR, R. C.; and Moser, M.: Dual Displacement and Velocity Ballistocardiograph Apparatus. Amer. Heart J., 44:248, 1952.
- PORDY, L.; MASTER, A. M.; and CHESKY, K.: Value of Cardiac Function Texts in Industry. J. Am. Med. Assoc., 148: 813, 1952.
- PORDY, L.; TAYMOR, R. C.; MOSER, M.; CHESKY, K.; and MASTER, A. M.: Clinical Evaluation of the Ballisto-cardiogram. I. Normal Subjects. Am. Heart J. 42:321, 1951.
- POVZHYTKOV, M. M.: (On a Method for Ballistocardiographic Studies in Dogs) Fiziol. Zh. 7:569-570, 1961. (Russian) English Translation by NASA as NASA-TT-F-8534, Sept. 1963.
- POZNIAK, V. M.: (Experience in Utilization of Electro- and Ballistocardiography in Detailed Medical Examination.) Voenno-Med. Zh., 7:70, 1961. (Russian)
- Pozniak, V. M.: (On Ballistocardiographic Changes in Mitral Stenosis.) Klinich. Med., (Moscow), 37:74, 1959.
- Pratt, P. L.; Carbonara, P.; and Fontanini, F.: Ricerche di Balistografie Clinica. (Clinical Ballistocardiography.) Minerva Med., (Turin), 2:774, 1954. (Italian)
- Prati, P. L.; Fontanini, F.; and Carbonaka, L.: (Ballistocardiography during Arterial Hypertension.) Progr. Med. (Naples), 11: 129-34, 1955. (Italian)

- PRETORIUS, P. J.: (Experimental Investigations on Ultralow Frequency Acceleration Ballistocardiography.)
  Thesis. Free University of Amsterdam, Amsterdam,
  The Netherlands, 1962. (Monograph) (In English)
- PRETORIUS, P. J.; KNOOP, A. A.; and HOITINK, A. W. J. H.: Ultra-low Frequency Acceleration Ballistocardiography in Dogs. *In:* Proc. of the 3rd European Symposium for Ballistocardiography, Brussels, Belgium, April 16–17, 1962, p. 129.
- Probst, J. Y.: (Theoretical Study of Electromagnetic Ballistocardiographs by Dock.) Cardiologia (Basel), 24: 118, 1954.
- PROBST, J. Y.; DELACHAUX, A.; and SCHELLING, J. L.: (Normal Ballistocardiogram.) Cardiologia (Basel), 23:142, 1953.
- Proceedings: First Congress of the Society for Ballistocardiographic Research. "Woudschoten", Zeist, The Netherlands. Dept. Of Med. Physics, Physics Laboratory, Utrecht, April 1960. Sponsor: Prof. H. C. Burger
- Proceedings: Fourth (European) Congress for Ballistocardiography (Soc. for Ballistocardiographic Research), Lille, France, April 1963. Sponsor: Dr. J. K. Merlen
- Proceedings: Third European Symposium for Ballistocardiography (Soc. for Ballistocardiographic Research), Brussels, Belgium, April 1962. Sponsor: L. Jonnart (Namur, Bel.)
- Proceedings: Second European Symposium for Ballistocardiography (Soc. for Ballistocardiographic Research), Bonn, Germany, March 1961. Sponsor: Prof. Herbert Klensch
- PRUITT, R. D.: Recent Advances in the Diagnosis of Heart Disease. J. Michigan Med. Soc. 51: 1421, 1952.
- Puddu, V.: Una Semplice Tenica per Esegure Balistocardiogrammi. (Simple Technique for Obtaining a Ballistocardiogram.) Cuore e Circol., 35, 334, 1951.

R

- RADNER, S.; LINDER, E.; DAHLBACK, O.; EDLER, I.; and GUSTAFSON, A.: (Suprasternal Pressure Curves in Early Mitral Stenosis.) Acta. Med. Scand. 154:299, 1956.
- RAGER, G. R.: La Ballistocardiographie; Ses Bases Physiques et ses Application Cliniques. Paris, Masson et Cie, 1957. (Monograph) (French)
- RAGER, R.; and NATOF, J.: (Ballistocardiography.) France Med., 16:19, 1953. (French)
- RAKEL, R. E.; SKILLMAN, T. G.; and BRAUNSTEIN, J. R.: The Ballistocardiogram in Juvenile Diabetes Mellitus. Circulation, 18:637, October 1958.
- RAPPAPORT, M. B.: Considerations in Ballistocardiography. Modern Concepts of Cardiovascular Disease (New York), 24:277-81, 1955.
- RAPPAPORT, M. B.: Displacement, Velocity and Acceleration Ballistocardiograms as Registered with an Undamped Bed of Ultralow Natural Frequency. I. Theory and Dynamic Considerations. Am. Heart J., 52:488, Oct. 1956.

- RAPPAPORT, M. B.: Displacement, Velocity and Acceleration Ballistocardiograms as Registered with an Undamped bed of Ultralow Natural Frequency. II. Instrumental Considerations. Am. Heart J., 52: 643, 1956.
- RAPPAPORT, M. B.: Displacement, Velocity and Acceleration Ballistocardiograms as Registered with an Undamped Bed of Ultralow Natural Frequency. III. The Normal Ballistocardiogram. Am. Heart J., 52:847, 1956.
- RAPPAPORT, M. B.: Modern Concepts of Cardiovascular Disease: Considerations in Ballistocardiography, 24: 277, June 1955.
- RAPPAPORT, M. B.; SPEAGUE, HOWARD, B.; and THOMPSON, WILLIAM B.: Ballistocardiography. I. Physical Considerations. Circulation, 7:229, 1953.
- REEVES, T. J.; ELLISON, H.; EDDLEMAN, E. E., Jr.; and SPEAR, A. F.: The Application of Direct Body Ballistocardiography to Force Ballistocardiography. J. Lab. & Clin. Med., 49: 545, April, 1957.
- REEVES, T. J.; HEFNER, L. L.; JONES, W. B.; and SPARKS, J. E.: Design of an Ultra-low Frequency Force Ballisto-cardiograph on the Principle of the Horizontal Pendulum. Circulation, 16:36, 1957.
- REEVES, T. J.; HEFNER, L. L.; JONES, W. B.; and SPARKS, J. E.: Wide Frequency Range Force Ballistocardiogram: Its Correlation with Cardiovascular Dynamics. Circulation, 16:43, 1957.
- REEVES, T. J.; WILLIS, K.; BOOTH, E.; and ELLISON, H. S.: Calibration of the Direct Ballistocardiogram. Circulation, 7:732, 1953.
- Reiser, M.; Reeves, R. B.; and Armington, J.: The Ballistocardiograph in Psychophysiologic Research. Circulation Res., 1: 469, Sept. 1953.
- Reiser, M. F.; Reeves, R. B.; and Armington, J.: Effects of Variations in Laboratory Procedures and Experiments Upon the Ballistocardiogram, Blood Pressure, and Heart Rate in Healthy Young Men. Psychomat. Med., 17: 185, 1955.
- REISSMANN, K.; DIMOND, E. G.; and LAMB, K.: Torsion Ballistocardiograph. Presented at the 24th Scientific Session of the Am. Heart Assoc., Atlantic City, 1951. (Abstract)
- REISSMANN, K. R.; and DIMOND, E. GREY: Torsion Ballistocardiography: With Special Reference to Patterns in Surgically Amenable Cardiovascular Diseases. Circulation, 8:585, 1953.
- REISSMANN, K. R.; DIMOND, E. G.; HABER, F.: Torsion Ballistocardiography with Special Reference to Patterns in Surgically Amenable Cardiovascular Diseases. Med. Proj. Rep. Project No. 21 1204-0001, Report No. 3: 1-33, 1953.
- RIBEIRO, C.; and ROMOS, O.: Preliminary Respiration on the Genesis of Ballistocardiographic Waves. Med. Contemp. (Lisbon), 77:1, 1959. (Port.)
- RIJLANT, P.: Introduction. *In:* Proc. of the 3rd European Symposium for Ballistocardiography, Brussels, Belgium, April 16–17, 1962, p. 10.

- RINZLER, S. H.; BAKST, H.; and ROSENFELD, S.; Comparison of Usefulness of Dock Electromagnetic Ballistocardiograph and Exercise Tolerance Test in Detection of Coronary Insufficiency. N.Y. J. Med., 52:1277, 1952.
- RIVIN, A. U.: Clinical Experience with the Portable Electromagnetic Ballistocardiograph. California Med., 80: 16, 1954.
- RIVEN, S. S.; POCOCK, D. G.; KORY, R. C.; ROEHM, D. C.; DANERSON, R. S.; and MENEELY, G. G.: The Control of Hypertension with 1-Hydrazinophthalazine (Apresoline). Am. J. Med., Feb. 1963. p. 160.
- ROCHET, J.: Le B.C.G. d'Ultra Basse Frequence dans les Coronaropathies. *In:* Proc. 4th European Symposium for Ballistocardiography, Lille, France, April 8-9, 1963.
- ROCHET, J.: Le Balistogramme dans l'Hypertension Veineuse. *In*: Proc. of the 3rd European Symposium for Ballistocardiography, Brussels, Belgium, April 16-17, 1962, p. 248.
- ROCHET, J.: L'onde Auriculaire dans un Cas de Dissociation auriculo-ventriculaire. *In*: Proc. of the 3rd European Symposium for Ballistocardiography, Brussels, Belgium, April 16-17, 1962, p. 254.
- RÖDENBECK, M.: Einfluss der Herzbewegung auf das Ballistokardiogramm. *In:* Proc. of the 3rd European Symposium for Ballistocardiography, Brussels, Belgium, April 16–17, 1962, p. 83.
- RÖDENBECK, M.: (Limitations of Ballistocardiographic Stroke Volume Determinations.) Z. Kreislaufforsch., 50:117, 1961. (German)
- RÖDENBECK, M.: Significance of Electrocardiographic and Ballistocardiographic Changes Induced by Smoking. Am. N.Y. Acad. Sci., 90: 199, 1960.
- RÖDENBECK, M.: Untersuchungen zur Biophysik der Ballistocardiographi. Thesis, Karl Marx Univ., Leipzig, 1959. Monograph: (German) English Translations: "Studies of the Biophysics of Ballistocardiography," by U.S. Joint Public. Research Serv., Wash., D.C. as JPRS R-1410-D, 1961; FAA 1-6900-1
- RÖDENBECK, M.; and WEISSBACH, G.: (An Elongation Pendulum Ballistocardiograph with Short Pendulum Length.) Pflüegers Arch. Ges Physiol., 270:318, 1960. (German)
- RODSTEIN, M.; BURACK, B.; and YOUNG, D.: The Ballistocardiographic Findings in a Case of Coarctation of the Aorta With a Bicuspid Aortic Valve and Aortic Insufficiency. Angiology, (Baltimore), 4:446, 1953.
- ROEDENBECK, M.: See Rödenbeck, M.
- ROEHM, DAN C.; KORY, ROSS C.; and MENEELY, GEORGE R.: Responses of the Ballistocardiogram in Hypertensive Patients to the Acute Administration of Apresoline, Hexamethonium, Veratrone, Regitine and Sodium Amytal. Circulation, 7:329, 1953.
- ROGNONI, M.: Ballistocardiography in Practice. Arch. Med. Panam. (Panama), 3(3): 145-8, 1965. (Spanish)

- ROJAS VILLEGAS, F.; DEL CAMPO, E.; FALGARETE, P.; and BRAILOVSKY, D.: (The Pathological Ballistocardiogram.) From the 4th Inter-American Congress, Buenos Aires, Argentina, 1952. Rev. Med. Chile, 81: 187, 1953. (Spanish)
- ROJAS VILLEGAS, F.; DEL CAMPO, E.; FALGERETE, P.; and MANUBENS, S.: (Ballistocardiography in Mitral Stenosis; Pre- and Post-operative Studies.) Rev. Med. (Chile), 81:541, 1953. (Spanish)
- ROJAS VILLEGAS, F.; DEL CAMPO, E.; FALGARETE, P., BRAILOVSKY, D.; and MANUBENS, S.: (The Normal Ballistocardiogram.) From the 4th Inter-American Congress of Cardiology, Buenos Aires, (Argentina), 1952. Rev. Med. Chile, 81:181, 1953. (Spanish)
- Roma, D. S.: Balistocardiografia Clinica. Am. Heart J., 47:320, 1954.
- Rosa, L. M.: The "Displacement" Vibrocardiogram of the Precordium in the Low Frequency Range. Am. J. of Cardiol., 4:191, Aug. 1959.
- Rosa, L. M.: (Combined Elements of Ballistocardiography, Phonocardiography and Cardiography: Short Report.)

  Z. Ges. Inn. Med. Ihre Grenzgebiete (Leipzig), 11(8): 377, April 15, 1956. (German)
- Rosa, L. M.: Einfuhrung in die Ballistische Kardiographie. Munster, Verlag Regensberg, 1958. (German) (Monograph)
- Rosa, L.; and Kunos, I.: (The Graphic Differences Between the Precordial Ballistocardiogram and the Low Frequency Phonocardiogram.) Z. Kreislaufforsch. (Darmstadt) 45:203, 1956. (German)
- Rosa, L.; and Kunos, I.: (Illusions in the Ballistocardiographic Concept of Cardiokinetic Phenomena) Z. Kreislaufforschung (Darmstadt), 44:648, 1955. (German)
- Rosa, L. M.; and Luisada, A. A.: The Clinical Aspects of Accelerography. J. Maine Med. Assoc., 53: 80, 1962.
- Rosa, L. M.; and Luisada, A. A.: Low Frequency Tracings of Precordial Displacement and Acceleration. Technical Comparison of Various Systems. Am. J. Cardiol., 4:669, 1959.
- Rosa, L. M.; Constantino, J. P.; et al.: The Precordial Accelerogram in Normal Subjects and Noncardiac Patients. Exp. Med. and Surg., 19: 207, 1961.
- Rosa, L.; Plenezner, S.; and Bodroghy, G.: (Ballistostetheography as Amplification of Phonocardiographic Technic) Z. Kreislaufforsch. (Darmstadt), 44(13-14): 555-61, 1955. (German)
- Rosa, L.; PLENOZNER, S.; BODROGHY, G.; and VARGENDA, A.: (Chronol. Relation of First Heart Sound to Pressure Increase, Stethography with Accelerography of Thoracic Pulsation.) Z. Kreislaufforsch. (Darmstadt), 44(13-14): 530-7, 1955. (German)
- Rosa, V. L.; and Kunos, I.: Tieffrequentes Herzschallbild und Mechanische Herzarbeit. Cardiologia (Basle), 28:345, 1956.
- ROSENBLATT, W. H.: Ballistocardiography: Concepts of its Applicability in the Office Practice of Cardiology. Diseases Chest, 32: 400, 1957.

- ROSENBLATT, W. H.: Ballistocardiography in the Office Practice of Cardiology. Mississippi Doctor, 31:274, 1954.
- ROSENBLATT, W. H.; and HARBOUR, J. H.: The Value of the Ballistocardiograph in the Diagnosis of the Prodromal Stage of Acute Myocardial Infarction; Case Report. Mississippi Doctor, 33: 309, 1956.
- ROSENFELD, S.; BAKST, H.; BENJAMIN, Z. H.; RINZLER, S.; and Modell, W.: The Ballistocardiogram and the Apical Systolic Murmur. N.Y. State J. Med., 54:1344, 1954.
- Rosselli, M.: (Ballistocardiogram in Myocardial Infarct.) Atti. Soc. Ital. Cardiol., 15:189, 1954. (Italian)
- Rossi, P.: Value and Limitations of Ballistocardiographic Indications. Giorn. Med. Milit. (Roma), 105: 37-52, 1955. (Italian)
- Rossi, P.; and Farulla, A: Recent Observations on the Atrial Ballistocardiogram. Atti Soc. Ital. Cardiol. (Suppl. Folia Cardiol.), (Milan), 1: 237, 1956. (Italian)
- Rossi, P.; De Bonis, P.; Busnengo, E.; and Martini, G.: Relations Betwen Ventricular Expulsion Time and the Ballistocardiogram. Atti Soc. Ital. Cardiol. (Suppl. Al Folia Cardio.) (Milan), 1:235, 1956. (Italian)
- ROTH, G. M.; and SHICK, R. M.: Effect of Smoking on the Cardiovascular System of Man. Circulation, 17:443, 1958.
- ROZWADOWSKI-DOWZENKO, M.; JAZIENNICKI, B.; and OLEJNICZAK, P.: (Significance of Ballistocardiographic Studies in Prognosis of Myocardial Infarct.) Polskie Arch. Med. Wewnetrznej., 30:1179, 1960. (Polish)
- ROZWADOWSKI-DOWZENKO, M.; JAZIENIECKI, B.; OLEJ-NICZAK, P.; and SLASINSKI, T.: (Evaluation of Peripheral Arteries in Essential Arterial Hypertension.) Pólskie Arch. Med. Wewnetrznej. 28:744, 1958. (Polish)
- ROZWADOWSKI-DOWZENKO, M.; SLASINSKI, T.; JAZIENIECKI, B.; and OLEJNICZAK, P.: Balistokardiogram w Chorobie Nadcisnieniowej. (Ballistocardiograms in Hypertension) Polskie Tygod. Lekar. 13:998, 1958. (Polish)
- Rubenstein, E.: Medical Progress, Review of Clinical Ballistocardiography. New England J. Med., 247: 166, 1952.
- RUTLEDGE, D. I.: Aids in the Diagnosis of Coronary Disease. Lahey Clin. Bull. (Boston), 8:49, 1952.

S

- Safonov, I. D.: (On the Diagnostic Importance of Ballistocardiographic Changes in Disorders of Heart Rhythm and Cardioactivity in Patients with Mitral Stenosis and Atherosclerotic Cardiosclerosis.) Kardiologiia, 2:38, 1962. (Russian)
- SAFONOV, I. D.: (Method of Recording and Analyzing Ballistocardiograms in Valvular Heart Disease.) Terapevt,
   Ark., 31: 53, 1959. (Russian)
- Salonna, L.: (Ballistocardiographic Research in Subjects With Hypertension, Sortic Valve Defect and Aortic Aneurysm.) Minerva Cardioangiol. (Turin), 2(9-10): 343-8, 1954. (Italian)

- SALONNA, L.; and Vicino, N.: Behavior of Ballistocardiogram in Cardiopathic Women During Pregnancy, in Labor, After Labor and in Puerperium. Minerva Ginecol., (Turin), 9:337, 1957. (Italian)
- Salonna, L.; and Vicino, N.: (Electrocardiographic and Ballistocardiographic Examinations of Two Cases of Wolff-Parkinson-White Syndrome in Various Phases of the Puerperal State.) Ann. Ostet. Ginecol., 81:487, 1959. (Italian)
- Salonna, L.; and Vicino, N.: Studio Balistocardiografico delle Donne Cardiopatiche in Varie Fasi dello Stato Pierperale. Quaderni Clin. Ostet. Ginecol., 14:697, 1959. (Italian)
- Salvini, M.; and Scudier, U.: (The Ballistocardiogram in Pulmonary Silicosis; Correlations Between the Brown Grade, Anderson Index, and Spirographic Index of Emphysema; Study of 124 Subjects.) Med. Lavoro, 48:112, 1957. (Italian)
- Salvini, M.; Capodaglio, E.; and Scudier, U.: (Value and Significance of the Ballistocardiogram in Various Stages of Pulmonary Emphysema.) Cuore and Circol., 41:18, 1957. (Italian)
- Sandifer, S. H.: Ballistocardiography: Preliminary Experimental Studies. Med. Bull. of Europe. Command, U.S. Army, 8:310, 1951.
- Sandifer, S. H.: (Ballistocardiography [preliminary experimental study].) J. Med. Libanais (Beirut), 5:96, 1952
- SANGHVI, L. M.; and BANERJEE, K.: Ballistocardiogram in Chronic Severe Anemia. Circulation, 19:41, Jan. 1959.
- Sasamoro, H.; and Kitada, S.: (Ballistocardiography)
  Tokyo (Japan), Igaku Shoin Publish. Co., 1955. (Japanese)
- Sasamoto, H.; and Kitada, S.: (A New Method of Cardiac Function Test [3].) Saishin Igaku, 7:902, 1952. (Japanese)
- Sasamoto, H.; Ogino, Y.; et al: (Ballistocardiography) Cir. J.; 17: 229, 1959. (Japanese)
- Sato, Z.: (A Study of the Ballistocardiogram of Atrial Fibrillation.) Hokkaido J. Med. Sci., 36:324, 1961. (Japanese)
- Satterthwaite, T. E.: Cardiovascular Disease. N.Y., Lemcke and Buechner, 1913.
- Sawada, M.; Iehara, T.; and Fiyimoto, S.: (Studies on the Ballistocardiogram and Blood Capillaries in Normal Pregnant Women.) Iryo. (Tokyo), 15:197, 1961. (Japanese)
- Scarborough, W. R.: Ballistocardiogram in the Diagnosis of Coronary Atherosclerosis. Minnesota Med., 38:880, 1955.
- Scarborough, W. R.: Comments on Ballistocardiographic Studies in Experimental Animals. *In:* Proc. Ballistocardiograph Res. Soc., Cincinnati, Ohio, Oct. 28, 1956. (Abstract)

- Scarborough, W. R.: Comments on Progress in Ballistocardiographic Research and the Current State of the Art. In: Proc. 3rd European Symposium for Ballistocardiographic Research, Brussels, Belgium, April 1962. p. 98.
- Scarborough, W. R.: Current Status of Ballistocardiography. Prog. Cardiovasc. Dis., 2:263, 1959.
- Scarborough, W. R.: Some Circulatory Effects of Morphine-Barbiturate Anesthesia, Artificial Respiration, and Abdominal Compression Based on Ballistocardiographic Observations on Dogs. With a Review of Pertinent Literature. Am. Heart J., 54:651, 1957.
- Scarborough, W. R.; and Baker, B. M., Jr.: Editorial. Ballistocardiography; Appraisal of Current Status. Circulation, 16:971, 1957.
- Scarborough, W. R.; and Talbot, S. A.: Proposals for Ballistocardiographic Nomenclature and Conventions: Revised and Extended. (With Technical Appendix.) Circulation, 14:435, 1956.
- Scarborough, W. R.; Baker, B. M., Jr.; Beser, J.; Mason, R. E.; and Singewald, M. L.: The Spatial Distribution of Cardiovascular Forces: Vector Ballistocardiography. Presented at Scientific Sessions of the Am. Heart Assoc. Atlantic City, N.J. June 9, 1951. (Abstract)
- Scarborough, W. R.; Beser, M.; Talbot, S. A.; Mason, R. E.; Singewald, M. L.; and Baker, B. M., Jr.: A Method for Recording BCG Vectors. Bull. Johns Hopkins Hosp. 87: 235, 1950.
- Scarborough, W. R.; Davis, F. W., Jr.; Baker, B. M., Jr.; Mason, R. E.; and Singewald, M. L.: A Review of Ballistocardiography. Am. Heart J., 44:910, 1952.
- Scarborough, W. R.; Davis, F. W., Jr., Baker, B. M., Jr.; Mason, R. E.; Singewald, M. L.; Lore, S. A.; and Fox, L. M.: A Ballistocardiographic Study of 369 Apparently Normal Persons. An Anaylsis of "Normal" and "Borderline" Ballistocardiographs. Am. Heart J., 45:161, 1953.
- Scarborough, W. R.; Folk, E. E., III; SMITH, P. M.; and Condon, J. H.: The Nature of Records From Ultralow Frequency Ballistocardiographic Systems and Their Relation to Circulatory Events. Am. J. of Cardiol., 2:613. 1958.
- Scarborough, W. R.; McKusick, V. A.; and Baker, B. M., Jr.: The Ballistocardiogram in Constrictive Pericarditis Before and After Pericardiectomy. Bull. Johns Hopkins Hosp., 90: 42, 1952.
- Scarborough, W. R.; Mason, R. E.; Davis, F. W., Jr.; Singewald, M. L.; Baker, B. M., Jr.; and Lore, S. A.: A Ballistocardiographic and Electrocardiographic Study of 328 Patients with Coronary Artery Disease; Comparison With Results From a Similar Study of Apparently Normal Persons. Am. Heart J., 44:645, 1952.
- Scarborough, W. R.; Penneys, R.; Thomas, C. B.; Baker, B. M., Jr.; and Mason, R. E.: The Cardiovascular Effect of Induced Controlled Anoxemia. A Preliminary Ballistocardiographic Study of Normal Subjects and a Few Patients with Suspected Coronary Artery Disease. Circulation, 4: 190, 1951.

- Scarborough, W. R.; Smith, E. W.; and Baker, B. M., Jr.: Studies on Subjects With and Without Coronary Heart Disease. Serum Lipid, Lipoprotein, and Protein Determinations and Their Relation to Ballistocardio-graphic Findings. (A Preliminary Survey.) Am. Heart J. 59: 19, 1960.
- Schack, J. A.; Tannenbaum, O.; Friedfeld, L.; and Vesell, H.: The Ballistocardiogram in Persons Over 65 Years of Age. *In:* Proc. Am. Federation Clin. Res., Nat'l Meeting, 1952. (Abstract)
- Schelling, J. L.: L'Application Clinique du Ballistocardiographie de Dock. Thesis, Lausanne, 1953.
- Schelling, J. L.; and Saint-Jacques, A..: Le Balistocardiogramme Normal chez l'Enfant de 5 a 15 ans. (Ballistocardiography in a Normal Child at the Age of 5-15). Cardiologia (Basel), 32:119, 1958.
- Schennetten, F.: Vergleichende Elektrokardiographisch Ballistokardiographische Untersuchungen bei Focalinfekt. *In*: Proc. of the 3rd European Symposium for Ballistocardiography held at Brussels, Belgium, April 16–17, 1962. p. 167
- Schild, W.; and Kazmeier, F.: (Ballistocardiogram in Pulsus Alternans.) Ärztl. Wochenschr. (Berlin), 9: 954, 1954.
- Schild, W.; and Kazmeier, F.: (Construction of Vectorballistocardiograms From Three Leads.) Z. Kreislaufforsch, (Darmstadt), 44:537, 1955. (German)
- Schild, W.; Kazmeier, F.; and Schild, G. W.: (Ballisto-cardiographic Studies at end of Pregnancy.) Z. Geburtshilfe Gynakol. (Stuttgart), 146: 335, 1956. (German)
- Schnabel, T. G.; Fitzpatrick, H. F.; et al. A Technic of Vascular Catheterization with Small Plastic Catheters: Its Utilization to Measure the Arterial Pulse Wave Velocity in Man. Circulation, 5:257, 1952.
- Schroeder, H. J.; and Wendhut, G.: (On the Resonance and Elastic Features of the Human Body. A Contribution to the Significance of the Direct Ballistocardiogram.) Arch. Kreislaufforsch., 33:177, 1960. (German)
- Schumann, H.: Experimentelle und Klinische Untersuchungen Uber das Wesen der Direkten Ballistokardiographie. Verhandlungen der Deut. Ges. Kreislaufforsch. (Darmstadt), 22:238, 1956.
- Schumann, H.: (The Method of Direct Two-dimensional Ballistocardiography.) Z. Kreislaufforsch. (Darmstadt), 43(21-22): 796-804, 1954. (German)
- Schumann, H.: (Technically Simple Ballistocardiography With Infratone Condensator Microphone.) Z. Kreislaufforsch. (Darmstadt), 43:466, 1954. (German)
- Schwartz, G.: Fishman, S.: Hirschleifer, I.; and Fanh-Hauser, A.: Simple Economical Apparatus for Office Ballistocardiography. N.Y. J. Med., 52:1023, 1952.
- Schwartz, M. W.: Ballistocardiographic Observations on Dogs Before and After the Administration of Anaesthetics and Vasoactive Substances. Unpublished Data; Personal Communication. 1963.
- Schwarzschild, M. M.: Ballistocardiography with Electronic Elimination of the Influence of Vibrating Properties of the Body. *In:* Proc. Soc. Exper. Biol. Med., N.Y.C., 87: 509-11, 1954.

- Schweizer, W.; Von Planta, P.; Batschelet, E.; and Pletscher, A.: (Tobacco and Circulation. Part 2. Experiments on the Pharmacological Modification of the Effect of Nicotine on the Ballistocardiogram.) Cardiologia (Basel), 36:49, 1960.
- Scott, R. C.; IGLAUER, A.; GROEN, R. S.; KAUFMAN, J. W.; BERMAN, B.; and McQuire, J.: Studies on the Effect of Oral and Parenteral Administration of Visammin (Khellin) in Patients with Angina Pectoris. Circulation, 3: 80, 1951.
- Sebastiani, A.: (Ballistocardiography) Riv. Med. Aeronaut., 14:673, 1951. (Italian)
- Sebastiani, A.: (Ballistocardiography With Piezoelectric Crystal; First Results in Italy). Atti Soc. Ital. Cardiol., (1951) 13:393, 1952. (Italian)
- Sebastiani, A.; and Concina, B.: (Ballistocardiography.) Cuore circol. 35: 321, 1951. (Italian)
- SEBASTIANI, A.; and CONCINA, B.: (Ballistocardiography: Attempt at Quantitative Evaluation of the Ballistic Curve.) Arch. Maladies Coeur, 46:1031. 1953. (French)
- SEBASTIANI, A.; CASSINIO, R.; CONCINA, B.; and DE-SIMONE, G.: (Studies of Ballistocardiography. II. Mean Normal Values; Ventricular Tension Time; Duration of the Mechanical Ventricular Systole.) Cardiologia (Basel), 21:795, 1952.
- Sebastiani A., Concina, B.: (Ballistocardiography), Cuore Circol. 36:65, 1952. (Italian)
- Secondari, E.; and Pacini, A. J.: Studio Fisiologico del Ballistocardiogramma. Lo Stetoscopio, 4:272, 1952.
- Secondari, E.; Ross. B.; and Horowitz, I.: New Method of Timing Ballistocardiographs. N.Y. State Med. J., 54:248, 1954.
- Sedov, K. R.: (Ballistocardiographic Changes in Workers of an Irkutsk Mica Factory.) Soviet Med. 25: 109, 1961. (Russian)
- Seger, M.; and Walsh, J. P.: Modification of the Cardiac Output After Intravenous Injection of Hypertonic Glucose Solution. Am. J. Med. Sci., 217: 494, 1949.
- Selinger, A. G.; and Levin, S. L.: Use of Ballistocardiography in Evaluation of Paroxysmal Rapid Heart Action. J. Am. Med. Assoc., 155: 897, 1954.
- Selinger, A. G.; and Levin, Stanley L.: Ballistocardiographic Findings in a Case of Pulsus Alternans. Am. Heart J., 44: 311, 1952.
- SELVINI, A.; MIADONNA, V.; NICODEMI, E.: (Ballistocardiographic Study of a Group of Patients with Chronic Lung Disease.) Gior. Ital. Tuberc. (Milan), 8:330-5, 1954. (Italian)
- Serganti, A.; and Sebastiani, G.: (Ballistocardiogram in Normal Infant; 106 cases.) Pediat. Inter. (Rome), 5: 249, 1955. (Italian)
- SERGEEVA, K. A.: (Ballistocardiographic Studies in Congenital Heart Defects.) Vestn. Akad. Med. Nauk. SSR, 16:38, 1961. (Russian)
- SERGEEVA. K. A.: (Rise of Ballistocardiography in Surgical Therapy of Patients With Lesions of the Varvuiar Apparatus of the Heart.) Grudn. Khir., 3:32, 1961. (Russian)

- SEYMOUR, E. D.; TYLER, A. W.; and HUTCHISON, M. R.: Physical Considerations in the Construction of the Ballistocardiograph. *In:* Brown, H. R., et al.: Clinical Ballistocardiography. N.Y., Macmillan Co., 1952.
- SHEEHAN, G. A. Jr.; PRIEBE, F. K.; DRANETZ, A. I.; and HOWATT, G. N.: A New Pickup for Ballistocardiography. U.S. Armed Forces Med. J., 2:39, 1951.
- SIBILIA, D.: (Acute Ballistocardiographic Effects of an Embryonic Heart Extract. Therapeutic considerations.) Folia Cardiol. (Milan), 18: 263, 1959. (Italian)
- Sibilia, D.; Balistocardiografia Clinica. S.E.M., Rome, Societa Edizioni Mediche, 1953.
- Sibilia, D.: (New Methods of Bidirectional Ballistocardiography.) Clin. Nuovo (Rome), 14:179, 1952. (Italian)
- Sibilia, D.: (Prospects of Clinical Ballistocardiography.) Clin. Nuova (Rome), 15:227, 1952. (Italian)
- Sibilia, D.; and Benvenga, E.: (Electrocardiographic and Ballistocardiographic Findings of Ankylosing Spondylitis.) Reumatismo (Milan), 8 (suppl. 1):128, 1956. (Italian)
- SILICANI, A.: (Ballistocardiografia normal.) Am. Fac. Med. (Lima), 36:302, 1953.
- Silva da, R.; and Morais de, F.: (Ballistocardiography Review) Med. Contemp. (Lisbon) 72:101, 1954. (Port)
- Silva DA, R.; and Morais DE, F.: (Coarctation of Aorta: four cases) Med. Contemp. (Lisbon), 73:87, 1955. (Port)
- SILVA DA, R.; BOTELHO, L.; MORAIS DE, F.; COLACO, M.; CRUZDA, F.; and AQUIAR, A. O.: (Ballistocardiograms in the Study of Thyroid Function.) Med. Contemp. (Lisbon), 73:593, 1955. (Port)
- Simon, D. L.; Iglauer, A.; and Braunstein, J.: The Immediate Effect of Cigarettes on the Circulation of Healthy and Habitual Male Smokers. Am. Heart H., 48: 185, 1954.
- SIMONE, G. DE; and MASELLIS, F.: (Effects of Hexamethonium Loading Test on Ballistocardiogram and ECG in Hypertensive Subjects.) Folia Cardiol. (Milan), 13: 357-70, 1954. (Italian)
- Singewald, M. L.: Ballistocardiography: Past, Present, and Future. Ann. Int. Med., 41:1124, 1954.
- SIPILA, W.: (Ballistocardiography.) Duodecim, (Helsinki), 69:387, 1953.
- SLOER, M.; GUIMPEL, A.; BEREZOVSKY, M. R.; and GANEM, L. R.: (H Wave in Ballistocardiogram.) Rev. Med. Rosario, 45:162, 1955. (Spanish)
- SMITH, A. L., Jr.; and SMITH, A. L., Sr.: The Ballistocardiogram and its Evaluation in the Diagnosis of Heart Disease. Nebraska Med. J., 39: 506, 1954.
- SMITH, D. H.: The Ballistocardiogram as a Predictor of Myocardial Infarction. Am. J. Cardiol., 3:247, Feb. 1959.
- SMITH, D. H.; and Lewis, M. R.: Ballistocardiographic Instrumentation. Rev. Scient. Instr., 27: 835, 1956.
- SMITH, J. E.: Calibrated Instrumentation of the Ballistocardiograph. Trans. Am. Coll. Cardiol., 2: 189, 1952.

- SMITH, J. E.: Comparison of the Displacement, Velocity, and Acceleration Ballistocardiograph in Coronary Heart Disease. Am. Heart J., 46:692, Nov. 1953.
- SMITH, J. E.: Diagnostic Aids in Coronary Disease Using Exercise with Multiple Leads. Med. Ann. of D.C., 19: 485, 1950.
- SMITH, J. E.; and BRYAN, S.: The Low-Frequency Velocity Measurement Ballistocardiograph. Circulation, 5: 892, 1952.
- SMITH, J. E.; and BRYAN, S.: Studies of Frequency Response in Ballistocardiography. Am. Heart J., 45:40, 1953.
- SMITH, J. E., and BRYAN, SAMUEL: Simultaneous Calibrated Recording of Displacement, Velocity, and Acceleration in Ballistocardiography. Am. Heart J., 45:715, 1953.
- SMITH, J. E.; and PERLS, T.: A Calibrated Bar-magnet Velocity Meter for Use in Ballistocardiography. Am. Heart J., 44:872, 1952.
- SMITH, J. E.; and REIGHARD, H. L.: Comparison of Ballistocardiographic Systems with Special Reference to the Use of a Jerkmeter. Am. J. of Cardiol., 4:232, 1959.
- SMITH, J. E.; and ROSENBAUM, R.: Studies of the Effect of a Second Degree of Freedom in Ballistocardiography. Am. Heart J., 46: 799, 1953.
- SMITH, J. E.; LEDERER, L. G.; and HSU, I.: The Ballistocardiograph in Luminal Aortic Obstructions. Med. Ann. of D.C., 26: 404 Aug. 1957.
- SMITH, J. E.; LEDERER, L. G.; and MANDES, J. C.: Evaluation of the Calibrated Displacement, Velocity and Acceleration Ballistocardiograph in Angina Pectoris. Am. Heart J., 49:344, 1955.
- SMITH, J. E.; ROSENBAUM, R.; and OSTRICH, R.: Studies with the Displacement, Velocity and Acceleration Ballistocardiograph in Aortic Insufficiency. Am. Heart J., 48:847, 1954.
- SMITH, L. W.; Ross, B.; and PACINI, A. J.: Heart Damage and Critical Threshold of Nicotine. The N.Y. Physician and Am. Med., 43:3, 1954.
- SMITH, N. T.; and CORBASCIO, A. N.: The Genesis of the Split J Wave of the Ultra-low Frequency Dog Ballistocardiogram. Federation Proc. 22:307 (No. 2, Part 1)
  March-April 1963. (Abstract No. 874)
- SMITH, R. F.: Effect of Acute Partial and Complete Obstruction of Thoracic Aorta in Dogs (Including Blood Pressure and Ballistocardiograph Readings). Am. Surgeon, 19:1096, 1953.
- SOFFER, A.; and MURRAY, M.: Prolonged Observations of the Cardiovascular Status in Essential Hyperlipemia; with Special Reference to Serum Lipid Response to Heparin. Circulation, 10:255, August 1954.
- SOFFER, A.; Yu, P. N. G.; EPSTEIN, M. A.; and OLSEN, E. S.: Comparison of the Resting Electrocardiogram, Exercise Electrocardiogram and the Ballistogram During Prolonged Periods of Observation. Am. J. Med. Sci., 223: 378, 1952.

- Soldati, L. de: Balistocardiografia Clinica. Buenos Airos, Argentian, Araucaria, S. R. L., 1957. (Spanish)
- SOLDATI, L. DE: (The Ballistocardiogram in the Diagnosis, Evolution and Prognosis of Certain Cardiopathies.) In: 4th Inter-American Congress, Buenos Aires, Argentina, 1952. (Spanish)
- SOLDATI, L. DE: (The Detection of Coronary Disease by the Ballistocardiogram.) *In*: Symposia 3rd World Congress of Cardiology, Brussels, Belgium, Sept. 14–21, 1958.
- SOLDATI, L. DE; BALASSASIAN, S.; and HECTOR MEJIA, R.: El Balistocardiograma en los Deportistas. (Ballistocardiogram in Athletes). Rev. Arg. Cardiol., 24:143, 1957.
- Soldati, L. de; Doyle, J.; Navarro Viola R. and Rivier, J. L.: (Correlation of Ballistocardiographic and Hemodynamic Data in Some Cases of Congenital and Acquired Heart Disease.) Cardiologia (Basel), 30:146, March 1957.
- SOLDATI, L. DE; DOYLE, J.; and NAVARRO, VIOLA R.: (The Ballistocardiograph in the Detection of Heart Disturbances of Sarcoidosis.) In: 4th Inter-American Congress of Cardiology, Buenos Aires, Argentina, 1952. (Spanish)
- SOLDATI, L. DE; DOYLE, J.; and NARARRO VIOLA, R.: (Ballistocardiographic Changes Observed in Sarcoidosis.) Medicina (Buenos Aires), 13:228, 1953. (Spanish)
- SOLDATI, L. DE; et al.: (Ballistocardiogram in Reference to Functional Evaluation in Group of Patients With Different Cardiopathies.) Rev. Argent. Cardiol., 22: 181, 1955. (Spanish)
- SOLDATI, L. DE; HECTOR MEJIA, R.; and AVELLANEDA, M.: El Diagnostico Precoz de al Insuficiencia Coronaria por Medico del Balistocardiograma y de las Derivaciones Discriminativas Paracardiacas. (Early Diagnosis of Coronary Insufficiency Through the Use of the Ballistocardiogram and of Discriminative Precordial Leads of the Electrocardiogram.) Prensa Med. (Argentina), 40: 65, 1953.
- SOLDATI, L. DE; HECTOR MEJIA, R.; and NAVARRO VIOLA, R.: El Balistocardiograma en Algunas Arritmias Con un Ensayo de Interpretacion de las Ondas "H" e "I" del Balistocardiograma Normal. Rev. Argent. Cardiol., 19: 175, 1952.
- SOLDATI, L. DE; HECTOR MEJIA, R.; and NAVARRO VIOLA, R.: El Balistocardiograma en la Angina de Pecho y en el Infarto Del Niocardio. Rev. Argent. Cardiol., 18:153, 1951.
- Soldati, L. de; Hector Mejia, R.; Castro, C. M.; Stritzler, G.; and Avellandea, M.: (The Ballistocardiogram in Relation of Functional Capacity in a Group of Patients Affected by Different Heart Diseases.) In: 2nd World Congress of Cardiology, Am. Heart Assoc., Wash., D.C., Sept. 12-17, 1954. (Abstract)
- Soldati, L. de; Navarro Viola, R.; and Hector Mejia, R.: (The Electromagnetic Ballistocardiogram in Normal Subjects and in Coronary Disease.) Arch. Mal. Coeur., 45:108, 1952. Also in: Circulation, Vol. 6, 1952 (Abstract)

- SOLDATI, L. DE; NAVARRO VIOLA, R.; and HECTOR MEJIA, R.: (The Ballistocardiogram in Some Valvular Deformities and Cardiac Congenital Anomalies.) Rev. Argent. Cardiol., 18:189, 1951. (Spanish) Also in: Circulation, Vol. 6, 1952. (Abstract)
- SOLDATI, L. DE; NAVARRO VIOLA, R.; and HECTOR MEJIA, R.: (Ballistocardiogram in Various Valvular Lesions and Congenital Malformations.) Arch. Mal. Coeur. (Paris), 45:1016, 1952. (French)
- Soldati, L. de; Navarro Viola, R.; and Hector Mejia, R.: El Balistocardiograma Obtenido Con el Procedimiento Electromagnetico de Dock en Sujetos Normals. (Ballistocardiograms Obtained by Dock Electromagnetic Procedure in Normal Subjects.) Rev. Argen. Cardiol. 18:137, 1951.
- SOLDATI, L. DE; NAVARRO VIOLA, R.; and HECTOR MEJIA, R.: Curvas Balistocardiograficas en los Bloqueos de Rama, Ritmo Idioventricular y Algunas Taquicardias Paroxisticas. Rev. Argent. Cardiol., 19:188, 1952.
- SOLDATI, L. DE; PRESTERA, O.; and HECTOR MEJIA, R.: (Calibration of Electromagnetic Ballistocardiography.) Cardiologia (Basel), 29:417, 1956.
- STAREY, F.: Das Ballistakardiogramm. Z. Kreislaufforsch., 52: 915, 1963.
- STARR, I.: Abnormalities of the Amount of the Circulation (Hyper- and Hypokineamia) and Their Relation to Neurocirculatory Asthenia and Kindred Diagnoses. Am. J. Med. Sci., 204: 573, 1942.
- STARR, I.: (Ballistocardiogram.) Med. (Stuttgart), No. 3: 101-4, 1954.
- STARR, I.; The Ballistocardiogram. Paul Reed Rockwood Lecture, Iowa City, 1941.
- STARR, I.: The Ballistocardiogram in Diagnosis and Treatment of Cardiovascular Disease. Philadelphia, F. A. Davis, 1950. (2nd Edition)
- STARR, I.: The Ballistocardiograph, an Instrument for Clinical Research and for Routine Clinical Diagnosis. Thr. Harvey Lectures, Series 42:194, 1946-1947.
- STARR, I.: Ballistocardiographic Studies of Draftees Rejected for Neuro-Circulatory Asthenia. War Med., 5:155, 1944.
- STARR, I.: Clinical Studies on Incoordination of Circulation as Determined by Response to Arising. J. Clin. Invest. 22:813, 1943.
- STARR, I.: Clinical Studies With the Ballistocardiograph; in Congestive Failure, on Digitalis Action, on Changes in Ballistic Form, and in Certain Acute Experiments. Am. J. Med. Sci., 202: 469, 1941.
- STARR, I.: Clinical Tests of the Simple Method of Estimating Cardiac Stroke Volume From Blood Pressure and Age. Circulation, 9:664, 1954.
- STARR, I.: Editorial: On the Strength of the Heart. Circulation, XX: 807, Nov. 1959.
- STARR, I.: Essay on the Ballistocardiogram. J. Am. Med. Assoc., 155: 1413, 1954.
- STABR, I.: (II. Experimental and Theoretical Treatment.)

  Med. (Stuttgart), No. 4:104-7, 1955. (German)

- STARR, I.: Failure of the Heart Versus Weakness of Circulation. *In:* Blood, Heart and Circulation, Lancaster, Pa., Science Press, 1940, p. 195.
- Starr, I.: Further Clinical Studies with the Ballistocardiograph; on Abnormal Form, on Digitalis Action, in Thyroid Disease and in Coronary Heart Disease. Trans. Assoc. Am. Physicians, 59:180, 1946.
- STARR, I.: Further Studies on the Prognostic Value of Form Abnormalities of the Ballistocardiogram. (Proc. Ballistocardiograph Res. Soc., Atlantic City, N.J., April 27, 1963.)
  Am. J. Cardiol. 12:580, 1963. (Abstract)
- STARR, I.: Further Studies on 221 Hospital Patients Followed Until Death or for at Least 5 Years After Their Initial Ballistocardiograms (Abstract). Am. J. Cardiol. 10:462, 1962.
- STARR, I.: History and Development of Ballistocardiography. *In:* Proc. of the 3d European Symposium for Ballistocardiography Held at Brussels, Belgium, April 16–17, 1962, p. 12.
- STARR, I.: Normal Standards for Amplitude of Ballistocardiograms Calibrated by Force. Circulation, 11:914, 1955.
- STARR, I.: On Reading Ballistocardiograms. Am. J. Cardiol., 2:404, Oct. 1958.
- STARR, I.: On the Later Development of Heart Disease in Apparently Healthy Persons with Abnormal ballistocardiograms. Eight-to-Ten year After-Histories of 90 Persons Over 40 Years of Age. Am. J. Med. Sci., 214: 233, 1947.
- STARR, I.: (On Various Types of Ballistocardiographs and on the Methods of Standardizing Them.) *In:* Congres Mondial de Cardiologie, Paris, 1950.
- STARR, I.: Our Changing Viewpoint About Congestive Failure. Ann. Int. Med., 30: 1, 1949.
- STARR, I.: The Physiological Age of the Heart. *In:* Proc. 2d European Symposium for Ballistocardiography, Bonn, Germany, March 27-28, 1961, p. 15.
- Starr, I.: Present Status of the Ballistocardiogram. Ann. Internal Med., 37: 839, 1952.
- STARR, I.: Present Status of the Ballistocardiograph as a Means of Measuring Cardiac Output. Federation Proc., 4:195, 1945.
  - STARR, I.: Prognostic Value of Abnormalities of Ballistocardiographic Form as Determined by a 5-Year Follow-Up of 221 Hospital Patients. Am. J. Cardiol. 9:303, 1961. (Abstract)
- STARR, I.: Prognostic Value of Ballistocardiograms. Studies on Evaluation of the Doctor's Experience. J. Am. Med. Assoc., 187: 511, 1964.
- STARR, I.: The Relation of the Ballistocardiogram to Cardiac Function. Am. J. of Cardiol., 2:737, Dec. 1958.
- STARR, I.: Seminar on Ballistocardiography; Introduction. Am. J. Cardiol., 2:393, Oct. 1958.
- STARR, I.: Studies Made by Simulating Systole at Necropsy. VI. Estimation of Cardiac Stroke Volume From Ballistocardiogram. J. Appl. Physiol., 8:315, 1955.

- STARR, I.: Studies Made By Simulating Systole at Necropsy. VIII. Significance of the Pulse Pressure. Circulation, 14:1117, Dec. 1956.
- STARR, I.: Studies Made by Simulating Systole at Necropsy: XI. On the Higher Dynamic Functions of the Heart, and Their Reflection in the Pulse Wave. Circulation, 17:589, April 1958.
- STARR, I.: Studies Made by Simulating Systole at Necropsy. XII. Estimation of the Initial Cardiac Forces for the Ballistocardiogram. Circulation, 20:74, 1959.
- STARR, I.: Study of Prognostic Value of Abnormalities of Ballistocardiographic Form in 211 Hospital Patients Followed Until Death or for a Minimum of 5 Years. J. Am. Med. Assoc. (Author's Manuscript), 187:511, 1964.
- STARR, I.: A Theoretical Study on the Effect of Aortic Size on the Ballistocardiogram. Federation Proc., 3: 45 (No. 1), 1944.
- STARR, I.: Units for the Expression of Both Statis and Dynamic Work in Similar Terms, and Their Application to Weight-Lifting Experiments. J. of Appl. Physiol., 4:21, 1951.
- STARR, I.: Use of the Ballistocardiogram as a Measure of Maximum Force of Cardiac Contraction. Federation Proc., 9:121, 1950.
- STARR, I.: The Use of the Ballistocardiogram for the Detection of Myocardial Dysfunction Especially in Coronary Artery Diseases. *In:* 1st Intern. Congress of Cardioloby, Vol. 1. Paris, J. B. Bailliere & Sons, 1950. p. 478.
- STARR, I.; and BARCROFT, H.: Comparison of the Actions of Adrenaline and Noradrenaline on the Cardiac Output in Man. Clin. Sci., 10: 295, 1951.
- STARR, I.; and FRIEDLAND, C. K.: On the Cause of the Respiratory Variation of the Ballistocardiogram, With A Note on Sinus Arrythmia. J. Clin. Invest., 25:53, 1946.
- STARR, I.; and HILDRETH, E. A.: Changes in Ballistocardiograms of Healthy Persons and of Patients in Most Cases Followed for Periods of 10 Years or Longer. Assoc. Am. Physicians, 64:59, 1951.
- STARR, I.; and HILDRETH, E. A.: The Effect of Aging, and of the Development of Disease, on the Ballistocardiogram. A Study of 80 Subjects, Originally Healthy, Followed From 10-14 Years. Circulation, 5:481, 1952.
- STARR, I.; and Jonas, L.: On Supernormal Circulation in Resting Subjects (Hyperkinemia) With a Study of the Relation of Kinemic Abnormalities to the Basal Metabolic Rate. Arch. Int. Med., 71:1, 1943.
- STARR, I.; and JoNAS, L.: Syndrome of Subnormal Circulation in Ambulatory Patients. Arch. Internal Med., 66: 1095, 1940.
- STARR, I.; and McMichael, M.: Oxygen Transport, Circulation and Respiration in Healthy Subjects at Simulated Altitude of 16,000-18,000 Feet. J. Appl. Physiol., 1:430, 1948.

- STARR, I.; and MAYOCK, R. L.: Convalescence From Surgical Procedures. I. Studies of the Circulation Lying and Standing, of Tremor, and of a Program of Bed Exercises and Early Rising. Am. J. Med. Sci., 210: 701-713, 1945.
- STARR, I.; and MAYOCK, R. L.: On the Significance of Abnormal Forms of the Ballistocardiogram. A Study of 234 Cases With 40 Necropsies. Am. J. Med. Sci., 215: 631, 1948.
- STARR, I.; and Noordergraaf, A.: A Comparison Between Ultra-Low-Frequency Ballistocardiograms and Those Secured by an Improved High-Frequency Technique, With Studies to Explain Remaining Differences. Am. Heart J. 64: 79, 1962.
- STARR, I.; and OGAWA, S.: On the Aging of the Heart; Why Is It So Much More Conspicuous in the Ballisto Than in the Pulse. Am. J. Med. Sci., 242:399, 1961. Trans. Assoc. Am. Physicians, 74:246, 1961.
- STARR, I.; and OGAWA, S.: A Clinical Study of the First Time Derivative of the Brachial Pulse. Normal Standards and Abnormalities Encountered in Heart Disease. Am. Heart. J., 65: 482, 1963.
- STARR, I.; and OGAWA, S.: Incoordination of the Cardiac Contraction in Clinical Conditions; as Judged by the Ballistocardiogram and the Pulse Derivative. Am. J. Med. Sci., 244: 663, 1962.
- STARR, I.; and OGAWA, S.: Quantitative Studies on the Quickness of the Pulse. Am. J. Med. Sci., 243:309, 1962.
- STARR, I.; and OGAWA, S.: On the Relation Between the Ballistocardiogram and the Pulse; Diagnostic Advantages Gained by Simultaneous Records. *In:* Proc. of the 3rd European Symposium for Ballistocardiography held at Brussels, Belgium, p. 195, April 16–17, 1862.
- STABR, I.; and PEDERSEN, E.: Further Long Term Studies of the Ballistocardiogram With a Note on the Changes in the Records of Certain Elderly Persons Induced by Nitroglycerine. *In:* 2nd. World Congress of Cardiology Wash., D.C., Sept. 1954.
- STARR, I.; and RAWSON, A. J.: The Vertical Ballistocardiograph; Changes in the Cardiac Output on Assuming the Erect Posture, With a Further Theoretical Study of the Blood's Impacts. Am. J. Physiol., 133: 461, 1941.
- STARR, I.; and RAWSON, A. J.: The Vertical Ballistocardiograph; Experiments on Changes in the Circulation on Arising, With a Further Study of Ballistic Theory. Am. J. Physiol., 134: 403, 1941.
- STARR, I.; and ROYSTER, H. P.: Ballistocardiograph in Digitalis Action, on Changes in Ballistic Form and in Certain Acute Experiments. Am. J. Med. Sci., 202: 469, 1941.
- STARR, I.; and ROYSTER, H. P.: Ballistocardiographic Studies in Congestive Heart Failure, on Digitalis Action and in Case of Angina Pectoris. Trans. Assoc. Am. Physicians, 56: 249, 1941.

- STARR, I.; and Schnabel, T. G., Jr.: Further Experience with the Preparation Simulating Cardiac Function at Necropsy; its Utility for the Design and Evaluation of Clinical Methods for Estimating Cardiac Function. Trans. Assoc. Am. Physicians, 66:257, 1953.
- STARR, I.; and SCHNABEL, T. G., Jr.: Studies Made by Simulating Systole at Necropsy, III. On the Genesis of the Systolic Waves of the Ballistocardiogram. J. of Clin. Invest., 33:10, 1954.
- STARR, I.; and SCHROEDER, H. A.: Ballistocardiogram. II.

  Normal Standards, Abnormalities Commonly Found in

  Diseases of the Heart and Circulation, and Their Significance. J. Clin. Invest., 19: 437, 1940.
- STARR, I.; and Wood, F. C.: After-histories of 100 Males,
  Originally Healthy; Followed Until Death or for 20
  Years After their First Ballistocardiograms. *In*: 3rd
  World Congress of Cardiology, Brussels, September 1958. p. 419 (Abstract).
- STARR, I.; and Wood, F. C.: Studies with the Ballistocardiograph in Acute Cardiac Infarction and Chronic Angina Pectoris. Am. Heart J., 25:81, 1943.
- STARR, I.; and Wood, F. C.: Twenty Year Studies with the Ballistocardiogram. The Relation Between the Amplitude of the First Record of Healthy Adults and Eventual Mortality and Morbidity From Heart Disease. Circulation, 23:714, 1961.
- STARR, I.; ASKOVITZ, S. I.; FEDER, W.; and SCHILD, A.: Studies Made by Simulating Systole at Necropsy VII. Clinical Methods for Estimating the Work of the lt. Ventricle. With a Note on the Diminution of Heart Work as Age Advances. Circulation, 12: 1005 Dec. 1955.
- STARR, I.; BRAUNSTEIN, JOHN R.; DOCK, WILLIAM; GUBNER, RICHARD; HAMILTON, W. F.; NICKERSON, JOHN L.; RAPPAPORT, MAURICE B.; SCARBOROUGH, WILLIAM R.; and SMITH, JOHN E.: First Report of the Committee on Ballistocardiographic Terminology. Circulation, 7:929, 1953.
- STARR, I.; HORWITZ, O.; MAYOCK, R. L.; and KRUMBHAAR, E. B.: Standardization of the Ballistocardiogram by Simulation of the Heart's Function at Necropsy, with a Clinical Method for the Estimation of Cardiac Strength and Normal Standards for it. Circulation, 1:1073, 1950.
- STARR, I.; MAYOCK, R. L.; and BATTLES, M. G.: Convalescence From Surgical Procedures. II. Studies of Various Physiological Responses to a Mild Exercise Test. Am. J. Med. Sci., 210: 713, 1945.
- STARR, I.; MAYOCK, R. L.; HORWITZ, O.; and KRUMBHAAR, E. B.: On the Initial Force of Cardiac Contraction, Standardization of the Ballistocardiogram by Physiological Experiments Performed at Necropsy. Trans. Assoc. Am. Physicians., 62: 154, 1949.
- STABR, I.; PEDERSON, E.; and CORBASCIO, A. N.: The Effect of Nitroglycerine on the Ballistocardiogram of Persons With and Without Evidence of Coronary Heart Disease. Circulation, 12:588, 1955.

- Starr, I.; Rawson, A. J.; and Schroeder, H. A.: Apparatus for Recording the Heart's Recoil and the Blood's Impacts in Man (Ballistocardiograph), Experiments on the Principles Involved, Records in Normal and Abnormal Conditions. (Presented at Proc. Am. Physiol. Soc. 50th Ann. Meeting, 1938.) Am. J. Physiol. 123:195, 1938.
- Starr, I.; Rawson, A. J., Schroeder, H. A.; and Joseph, N. R.: Studies on the Estimation of Cardiac Output in Man, and of Abnormalities in Cardiac Function from the Heart's Recoil and the Blood's Impact; the Ballistocardiogram. Am. J. Physiol., 127:1, 1939.
- STARR, I.; RAWSON, A. J.; SCHROEDER, H. A.; and JOSEPH,
  N. R.: The Estimation of Cardiac Output and the Determination of the Blood's Impacts (Ballistocardiogram).
  J. Clin. Invest., 17:506, 1938. Proc. Am. Soc. Clin.
  Invest., 30th Ann. Meeting.
- STARR, I.; SCHNABEL, T. G., Jr.; ASKOVITZ, S. I.; and SCHILD, A.: Studies Made by Simulating Systole at Necropsy. IV. On the Relation Between Pulse Pressure and Cardiac Stroke Volume, Leading to a Clinical Method of Estimating Cardiac Output From Blood Pressure and Age. Circulation, 9:648, 1954.
- Starr, I.; Schnabel, T. G., Jr., and Mayock, R. L.: Studies Made by Simulating Systole Necropsy. II. Experiments on the Relation of Cardiac and Peripheral Factors to the Genesis of the Pulse Wave and the Ballistocardiogram. Circulation, 8:44, 1953.
- STARR, I.; SHENKIN, H. A.; CHENEY, R. H.; et al. On the Diagnosis of Hemorrhage in Man. Am. J. Med. Sci., 208: 421, 1944.
- STASINSKI, T.; and WENDER, M. (The Circulatory System in Multiple Sclerosis.) Neurol. Neurochir., Psychiat. Pol., 10:337, 1960. (Polish)
- STEFANSKI, T.: (Evaluation of the Circulatory System in Pulmonary Resection According to Polycardiographic Studies.) Postepy Hig. Med. Doswiadozalnej, 14:216, 1960. (Polish)
- Stern, Samuel: The Ballistocardiogram in Overweight Young Adults. Circulation, 17:87, 1958.
- STROBER, M: The Effect of the Dock Cigarette Smoking Test on the Ballistocardiogram; a Survey of a Normal Male Population. Air Force School of Avia. Med. (Randolph Field, Tex.). Rep. no. 56, May, 1956.
- STROBER, M.; Effect of the Dock Cigarette-Smoking Test on the Ballistocardiogram; Survey of a Normal Male Population. J. of Am. Med. Assoc. 161:1059, 1956.
- Stukalo, I. T.; Kulachkovskii, IuV.; and Shakhinidi, G. E.: (The State of the Blood Circulation System in Patients with Tuberculosis of the Lungs from Data of Instrumental Studies.) Probl. Tuberk., 38:70, 1960. (Russian)
- SUAREZ, R. M.; and SUAREZ, R. M. Jr.: (Ballistocardiograph; Preliminary Report and Bibliography.) Bol. Asoc. Med. (Puerto Rico), 43:451, 1951.
- SUAREZ, R. M.; and SUAREZ, R. M. Jr.: Surgical Risk in Presbycardiac Disorders; Evaluation of Senile Heart by Means of Ballistocardiography. Bol. Asoc. Med. (Puerto Rico), 43: 499, 1951.

- SUAREZ, R. M., Jr.; SUAREZ, R. M., Jr.; and Morales, P. L.: (The Ballistocardiogram in Rheumatic Heart, Disease.) Bol. Asoc. Med. (Puerto Rico), 46: 259, 1954.
- Suh, S. K.; Cooper, W. H.; Frederick, W. H.; and Eddleman, E. E., Jr.: Force, Work and Power Ballistocardiography. Am. J. Cardiol., 1:726, June, 1958.
- SUKHANOV, A. A.; ORANSKII, I. E.; SMIRNOV, N. F.; and BOGOMOLOVA, E. K.: (Capillary Mercury-Alkaline Transducer with Air-Damping for the Registration of Acceleration Ballistocardiograms.) Biul. Eksp. Biol. Med., 50:116, 1960. (Russian)
- Symposium on Ballistocardiography. Am. J. Cardiol.— Successive Issues Beginning Vol. II, No. 4, Oct. 1958.

#### Т

- TABEAU, J.: (Ballistocardiography in Hypertension.) Polskie Arch. Med. Wewnetrznej (Warsaw), 26(4): 596, 1956. (Polish)
- Talakov, A.: (A Fast Direct Electromagnetic Ballisto-cardiograph Not Producing Electrical Disorders.)Suvremenna Med. (Sofia) 12:91, 1961.
- Talakov, A.: Geschichte und Entwicklung der Ballistocardiographie in Blugarien. *In:* Proc. of the 3rd European Symposium for Ballistocardiography Held at Brussels, Belgium, April 16-17, 1962, p. 190.
- Talakov, A.: Prinzip und Ausrustung Unseres Neuen Storungsfreien Elektromagnetischen Ballistokardiographen. In: Proc. of the 3rd European Symposium for Ballistocardiography, Brussels, Belgium, April 16-17, 1962. p. 192.
- Talakov, A.: (Pre- and Postoperative Changes in the Ballistocardiogram in Mitral Stenosis.) Bull. Soc. Int. Chir. (Brussels), 19:46, 1960.
- Talakov, A. A.: Ballistocardiografiia. Suvremenna Med. (Sofia), 8:88, 1957.
- TALAKOV, A. A.: Ballistokardiogramma Pri Polnom Obratnom Raspoloahenii Unutrennikh Organov. (Ballistocardiography in Complete Transposition of Internal Organs.)
   Klinich. Med., (Moscow), 36: 149, Aug. 1958.
- TALAKOV, A. A.: (Pre- and Postoperative Ballistocardiographic Changes in Mitral Stenosis.) Suvremenna Med. (Sofia), 11:48, 1960.
- Talbot, S. A.: Biophysical Aspects of Ballistocardiography. Am. J. Cardiol., 2: 395, Oct. 1958.
- Talbot, S. A.: Computers Applied to Ballistocardiography. In: 11th Annual Conference on Electrical Techniques in Medicine and Biology, Minneapolis, November, 1958. (#38)
- Talbot, S. A.: Physical Principles of Vector Ballistocardiographic Measurement. ARDC Technical Report, TR 58-72, June 1958. ASTIA Document AD-158301 (Monograph)
- TALBOT, S. A.: Status of Ballistocardiography. In: 3rd I.B.M. Medical Symposium, Endicott, N.Y., Oct. 12, 1961.
- Talbot, S. A.: Vector Ballistocardiography. In: 3rd World Congress of Cardiology, Brussels, 1958. (Abstracts of Communications, p. 448.)

- Talbot, S. A.; and Harrison, W. K., Jr.: Characteristic Feature of the Exercise Ballistocardiogram in Coronary Heart Disease. Am. J. Cardiol. 10: 463, 1962. (Abstract)
- Talbot, S. A.; and Harrison, W. K., Jr.: Dynamic comparison of Current Ballistocardiographic Methods. Part I. Artefacts in the Dynamically Simple Ballistocardiographic Methods. Part II. Effect of a Platform in BCG Dynamics. Part III. Derivation of Cardiovascular Force From Body Motions. Circulation, Vol. XII, Nos. 4, 5 and 6, Oct., Nov. & Dec. 1955. pp. 577, 845 and 1022.
- TALBOT, S. A.; DEUCHAR, D. C.; DAVIS, F. W., Jr.; and SCARBOROUGH, W. R.: The Aperiodic Ballistocardiograph. Bull. Johns Hopkins Hosp., 94:27, 1954.
- TANDON, O. P.; and KATIYER, B. C.: Ballistocardiography; its Evaluation as a Diagnostic Index. J. Indian Med. Assoc., 34: 429, 1960.
- TANNENBAUM, O.; VESELL, H.; and SCHACK, J. A.: Relationship of the Natural Body Damping and Body Frequency to the Ballistocardiograph. Circulation, 13(3): 404. March 1956.
- TANNENBAUM, O.; VESELL, H.; and Schack, J. A.: The Spatial Vectorballistocardiogram. Am. Heart J., 48: 562, 1954.
- TANNENBAUM, O.; SCHACK, J. A.; and VESELL, H.: Relationship Between Ballistocardiographic Forces and Certain Events in the Cardiac Cycle. Circulation, 6: 586, 1952.
- TANNER, J. M.: The Construction of Normal Standards for Cardiac Output in Man. J. Clin. Invest. 28:567, 1049
- TANNER, J. M.: Fallacy of Per-Weight and Per-Surface Area Standards and Their Relation to Spurious Correlation. J. Appl. Physiol., 2: 1, 1949.
- Tapia Mendieta, F. A.: El Balistocardiograma en la Hipertension Arterial. Anales Fac. Med. (Lima), 40: 627, 1957.
- Tasci, A.: (Ballistocardiograms in 45 Normal Subjects.)
  Turk. Tip. Cemiyet Mecmuasi. (Istanbul), 27:440,
  1961.
- Tasci, A.: (Ballistocardiography in Coronary Diseases.)
  Tip. Fak. Med. (Istanbul), 24:499, 1961.
- TATARINOV, A. L.: (The Ballistocardiogram in Healthy Children.) Pediatria, 40:69, 1961. (Russian)
- TAYLOR, H. L.; and ANDERSON, J. T.: Serum Cholesterol Concentration and Ballistocardiographic Characteristics of a Middle-Aged Man. (Abstract) 2nd. World Congress of Cardiol., Wash., D.C. Sept., 1954. p. 232.
- Taylor, H. L.; and Tiede, K.: A Comparison of the Estimation of the Basal Cardiac Output From a Linear Formula and the "Cardiac Index". J. Clin. Invest. 31: 209, 1952.
- Taylor, H. L.; and Walker, H. C.: A Comparison of Factors Affecting the High-Frequency (Starr) and the Low-Frequency Critically Damped (Nickerson) Ballistocardiographs with Special Reference to Age and Body Dimension. Am. Heart J., 53:326 March 1957.

- TAYLOB, H. L.; BROZEK, JOSEF; and KEYS, ANCEL: Basal Cardiac Function and Body Composition With Special Reference to Obesity. J. Clin. Invest., 31:976, 1952.
- TAYLOR, H. L.; MALONEY, W. F.; and KEYS, A.: Factors Affecting the Low-Frequency Critically-Damped Ballistocardiogram, With Special Reference to Age, Body Size and Body Composition. Am. Heart J., 48: 864, 1954.
- TAYLOR, R. D.; and PAGE, I. H.: The Effect on Antipressor Kidney Extract, Angiotonin Methyl Guanidine and Tyramine on Cardiac Output as Measured by the Ballistocardiograph in Hypertensive and Normal Persons. Am. J. Med. Sci., 205: 66, 1943.
- TAYMOR, R. C.; MOSER, M.; CHESKY, K.; PORDY, L.; and MASTER, A. M.: Clinical Ballistocardiography; experience in 400 Consecutive Cases. Bull. N.Y. Acad. Med., 27: 385, 1951.
- TAYMOR, R. C.; PORDY, L.; CHESKY, K.; MOSER, M.; and MASTER, A. M.: The Ballistocardiogram in Coronary Artery Disease. J. Am. Med. Assn., 148: 419, 1952.
- TENNEY, S. M.; and HONIG, C. R.: The Effects of the Anti-G Suit on the Ballistocardiogram; Reversal of the Normal Respiratory Variations and Change in Thoracic Blood Volume. J. of Avia. Med., 26: 194-9, 1955.
- Terranova, S.: (Reactions to High Environmental Temperatures. VI. Electrocardiographic and Ballistocardiographic Studies.) Boll. Soc. Ital. Biol. Sper., 29:1558, 1953. (Italian)
- THOMAS, C. B.; and MURPHY, E. A.: Circulatory Responses to Smoking in Healthy Young Men. Ann. N.Y. Acad. Sci., 90: 226, 1960.
- THOMAS, C. B.; and MURPHY, E. A.: The Circulatory Response to Smoking. The Variation in Ballistocardiographic Smoking Tests in Healthy Young Men. J. Chronic Diseases, 1958, 81/2 (202-229).
- THOMAS, H. D.; EDDLEMAN, E. E., Jr.; FREDERICK, W., and PAPPAS, R.: The Effects of Occluding the Venous Inflow to the Heart and Arterial Outflow on the Ballistocardiogram in Dogs. Clin. Res., 3:70, 1955. (Abstract)
- THOMAS, H. D.; FREDEBICK, W. H.; KNOWLES, J. L.; REEVES, T. J.; PAPPAS, R.; and EDDLEMAN, E. E.: The Effects of Occlusion of the Venae Cavae, Aorta and the Pulmonary Artery on the Dog Ballistocardiogram. Am. Heart J., 50: 424, 1955.
- Thomas, H. D.; Frederick, W. H.; Pappas, A. R.; Real, J. D.; and Eddleman, E. E., Jr.: The Effects of Moderate Generalized Hypothermia on the Ballistocardiogram of the Dog. Am. Heart J., 51:562, April, 1956.
- Thompson, W. B.; Rappaport, M. B.; and Sprague, H. B.: Ballistocardiography. II. The Normal Ballistocardiogram. Circulation, 7:321, 1953.
- THORSON, A. H.: (Ballistocardiographic Methods of Calculating Cardiac Output in Man; Reliability and Limitations of Methods.) Scan. J. Clin. Lab. Invest. (Oslo), 7 (suppl. 20): 87, 1955.
- TILMANT, J.; and MERLEN, J. F.: (Ballistocardiography; a New Technic Applied to Cardiology.) Echo Med. Nord. 24:334, 1953. (French)

- TISHCHENKO, M. I.: (The Importance of Body Vibrations in Man in the Formation of the Ballistocardiogram) Biofizika, 8:246-252, 1963. (Russian)
- Tobacco and the Ballistocardiogram: Brit. Med. J., 4931: 114, July 9, 1955. (Abstract)
- Tobin, M.; Edson, J.; Dickes, R.; Flamm, G. H.; and Deutsch, L.: The Elimination of Body Resonance Distortion From the Direct-Body Ballistocardiogram. Circulation, 12:108, 1955.
- Tolley, R. W.; Beard, O. W.; and Doherty, J. E.: Use of Pentaerythritol Tetranitrate (Peritrate) in Treatment of Angina Pectoris. Am. Heart J., 44:866, 1952.
- Tormo Alfonso, V.: (Ballistocardiogram in the Diagnosis of Coronary Disease.) Med. Espan. (Valencia), 37: 405, 1957. (Spanish)
- Tormo Alfonso, V.; Baguena-Candela, J.; and Baguena-Candela, R.: (Ballistocardiography in Exploration of the Myocardium.) Med. Espan. (Valencia), 29:482, 1953. (Spanish)
- Tormo Alfonso, V.; Baguena Candela, J.; and Lopez, Merino V.: (Ballistocardiographic and Electrocardiographic Exercise and Hypoxemia Tests in the Diagnosis of Coronary Insufficiency.) Med. Espan. (Valencia), 32:86, 1954. (Spanish)
- Tormo Alfonso, V.; Baguena Candela, J.; and Lopez, M. V.: (Ballistocardiographic Electrocardiographic Exercise and Hypoxemia Tests in the Diagnosis of Coronary Insufficiency.) Med. Espan. (Valencia), 31:86-93, July 1954. (Spanish)
- TORTORA, A. R.: Ballistocardiography; Its Meaning and Role in Clinical Medicine. Ill. Med. J., 116:310, 1959.
- Trefny, Z.; and Smetanka, E.: (New Principle of Usage of Piezoelectric Appliance in Ballistocardiography.) Cesk. Fysiol. (Prague), 5:487-89, 1956.
- Trefny, Z.; and Smetanka, E.: (A New Principle in the Use of Piezoelectricity in Ballistocardiography.) Physiol. Bohem. (Prague), 5:487-89, 1956.
- TROTTER, C. in discussion of paper by Gordon, J. W. On Certain Molar Movements of the Human Body Produced by the Circulation of the Blood. J. Anat. & Physiol. 11: 755, 1877.
- TSINTSADZE, G. E.: Pribor Dlia Registratsii Ballistokardiogrammy Skorosti Smeshcheniia i Uskoreniia. (Apparatus for Registration of Ballistocardiographia Displacements and Acceleration) Biul. Eksp. Biol. Med., 44: 122, 1957. (Russian)
- Tucker, W. T.; and Ostrom, E. J.: The Effects of Progressive Damping and Other Technical Procedures on the Direct Displacement Ballistocardiogram. Am. Heart J., 49:21, 1955.
- Tucker, Wm. T.; Knowles, John L.; and Eddleman, E. E., Jr.: Mitral Insufficiency; Cardiac Mechanics as Studied with the Kinetocardiogram and Ballistocardiogram. Circulation, 12:278, 1955.
- Tumanovskii, M. N.; and Safonov, IvI).: (On an Analysis of Time Correlations in Direct Ballistocardiographic Rate Determination.) Klinich. Med. (Moscow), 38:60, 1960. (Russian)

- Tumanovskii, M. N.; and Safonov, IvD.: (On a Method for the Registration and Principles for the Classification of Ballistocardiograms.) Klinich. Med. (Moscow), 38: 99, 1960. (Russian)
- Turner, L. B.: Ballistocardiography; a Review. J. Mt. Sinai Hosp. (N.Y.), 17: 1060, 1951.
- Tuveri, A.; and Pitzus, F.: (Ballistocardiogram in Myocardial Infarct.) Riforma Med. (Naples), 68:253, 1954. (Italian)
- Tuveri, A.; and Pitzus, F.: (Morphology of Ballistocardiograms in Rheumatic Valve Disease.) Minerva Med. (Turin), 2:332, 1954. (Italian)
- Tuveri, A.; and Pitzus, F.: Osservazioni sul Balistocardiogramma nell'infarto del Miocardio. Riforma Med. (Naples), 10:3, 1954. (Italian)
- Tuveri, A.; Pitzus, F.; and Cocco, F.; (Evaluation of the Importance of a Fat Meal as a Factor Precipitating Attacks of Angina Pectoris in Coronary Patients.) Riforma Med. (Naples), 71:461, 1957. (Italian)
- Tuveri, A.; Pitzus, F.; and Sulis, E.: (Ballistocardiographic Changes in Acute Anemia.) Riforma Med. (Naples), 67:880, 1953. (Italian)

# U

- UEDA, S.; WATANABE, A.; and TSUJI, F.: (Study on Surface Electricity (I). On the Theory and Application of U-Effect.) Mem. Coll. Agr., Kyoto Univ., No. 57 (Chem. Series 24.) July, 1950.
- UEDA, S.; WATANABE, A.; and TSUJI, F.: (Study on Surface Electricity II. Measurement of Steaming Potential by Vibration Method [1].) Mem. Coll. Agr., Kyoto Univ., No. 60, March 1951.
- UEDA, S.; WATANABE, A.; and TSUJI, F.: Study on Surface Electricity IV. Capacity Measurement at Mercury-Solution Interfaces by Impedance Matching Methods [I].) Mem. Coll. Agr., Kyoto Univ., No. 60, March 1951.
- Urbach, F.; Hildreth, E. A.; and Wackerman, M. T.: The Therapeutic Uses of Low Fat, Low Cholesterol Diets. J. of Clin. Nutr., I:52, 1952-53.
- URZAY, V. B.; MERLEN, J. J.; and Alonso, L.: (Effects of Pulmonary Collapse Therapy on Ballistocardiogram.) Arch. Maladies Coeur, 47:1026, 1954.
- Ussher, N. T.: The Viscerospinal Syndrome; A New Concept Visceromotor and Sensory Changes in Relation to Deranged Spinal Structures. Ann. Internal Med., 13:2057, 1940.

# ν

- Valasque, P.; and Ambrosi, C.: (The Contribution of Ballistocardiography in Certain Difficult Diagnoses.) Marseille Med., 97: 429, 1960. (French)
- VALENTE, J. L.: (Immediate Effect of Apresoline and Hexamethonium in Ballistocardiography of Patients with Arterial Hypertension.) Gax. Med., 10:86, 1957. (Portuguese)
- Valoroso, L.; Nigro, G.; and Gravante, G.: (First Research on the Ballistocardiographic Evaluation of the Diphtheric Myocardiopathy.) Pediatria (Naples), 68: 621, 1960. (Italian)

- Van Brummelen, A. G. W.; Scarborough, W. R.; and Josenhans, W. K. T.: On the Elimination of Pulse Wave Velocity From Stroke Volume Determinations Utilizing the Ultra-Low Frequency Displacement Ballistocardiogram. Am. Heart J., 67:374, 1964.
- Vandecasteele, J.; Merlen, J. F.; and Desreulles, J.: (Ballistocardiography for Diagnosis of Malformations Amenable to Surgery.) (Lille) Chir., 9:7, 1954. (French)
- VAN LINGEN, B.; GEAR, J. H.; WNIDBORNE, J.; and LISTER, M.: The Ballistrocardiogram in Aortic Stenosis. Am. Heart J., 47: 560, 1954.
- Van Lingen, B.; Lister, M.; Robinson, J.; and Elzas, B.: (The Ballistocardiogram in Mitral Valve Disease. I. Disturbances of the F.G.H. and I Waves.) S. African J. Lab. Clin. Med., 4:131, June 1958.
- Van Lingen, B.; Lister, M.; Robinson, J.; and Elzas, B.: (The Ballistocardiogram in Mitral Valve Disease. II. Mitral Stenosis Compared with Mitral Incompetence.) S. African J. Lab. Clin. Med., 4: 206, Sep. 1958.
- Van Lingen, B.; Lister, M.; and Robinson, J.: A Method for the Anaylsis of the Form (or Pattern) of the Ballistocardiogram. S. African J. Med. Sci. (Johannesburg), 20:37, 1955.
- Van Lingen, B.; Lister, M.; and Robinson, J.: (A Method for the Analysis of the Form (or Pattern) of the Ballistocardiogram.) S. African J. Med. Sci., (Johannesburg.) 20:37-38, July 1955.
- Van Lingen, B.; Lister, M.; Robinson, J.; and Elzas, B.: A Method for the Study of the Form of the High Frequency Undamped Ballistocardiogram. Am. Heart J., 51:829, 1956.
- Vara Lopez, R.; and Bravo Olalla S.: (Ballistocardiographic Study of Chronic Constrictive Pericarditis Before and After Pericardiotomy.) Rev. Clin. Espan. (Madrid), 51:99, 1953. (Spanish)
- Vassalle, M.; Biancalana, D.; and Lotti, P.: Il Ballistocardiogramma dell'Adolescente. Rass. Fisiopatol. (Rome), 29: 290, May 1957.
- Vastersaeger, M. M.; Friart, V. J.; Hartenberg, D.; and Rochet, J.: Balistogramme des Lesions Stenosantes Congenitales at Acquises de l'Aorte. *In:* Proc. of the 3rd European Symposium for Ballistocardiography, Brussels, Belgium, April 16–17, 1962. p. 234.
- VELVART, J.; and HUPKA, J.: (Changes in the Ballistocardiographic Picture in Silicosis.) Pravoc. Lek., 12: 404, 1960. (Cz.)
- Verdun Di Cantogno, L.; De La Pierre, M.; Costa, P.; and Pugliese, F.: Rilievi e Considerazioni Sul Valore di Alcune Indagini Semeiotico Strumentali per la Diagnosi Delle Complicazioni Cardio-Vascolari nei Diabetici. (Findings and Comments on the Value of Some Semeiotico Instrumental Tests for Diagnosis of Cardiovascular Complications in Diabetics.) Minerva Med. (Turin), 49:57, 1958. (Italian)
- Vicino, N.; and Salonna, L.: Il Balistocardiogramma delle Donne Gravide in Varie Fasi dello Stato Puerperale. Clin. Ostet. Ginecol. Univer. 29:3, 1958.

- VIDARTE ZABOLA, M.; and BALOGUER-VINTRO I.: Hemodynamic Principles in Ballistocardiography of Mitral Stenosis. Rev. Espan. Fisiol. (Barcelona), 10:147-52, 1954.
- VITENSHTEINAS, G. A.: (Classification of Ballistocardiographic Data.) Klinich. Med., (Moscow), 36:95, 1958. (Russian)
- Von Wittern, W. W. See Wittern, W. W. von.
- Vural, L.: Balistokardiysgrafik Çalişmalar. Instanbul Klinik Dersleri, 8: 47, 1953.

# W

- WADE, E. G.; FULTON, R. M.; and MACKINNON, J.: The Ballistocardiogram in the Diagnosis of Coronary Arterial Disease. Brit. Heart J. 18:65, Jan. 1956.
- WALKER, P.; REEVES, T. J.; WILLIS, K.; CHRISTIANSON, L.; PIERCE, R. J.; and KAHN, D.: The Effect of Surface and Recording Technique on the Direct Ballistocardiogram. Am. Heart J., 46: 166, 1953.
- Walsh, J. P.: On the Mechanism by Which Intravenous Injection of Hypertonic Glucose Solution Causes Increased Cardiac Output. Am. J. Med. Sci., 217:498, 1949.
- Walton, R. P.; and others: Direct Measurement of Heart Force Changes Produced by Drugs. *In*: Am. Med. Assoc., Sci. Sess., Atlantic City, N.J., 1955. Sec. on Exp. Med., and Therap. (Scientific Exhibit)
- Wang, K. C.; and Howland, W. S.: The Ballistocardiogram. Aid in Evaluation of Anesthetic and Surgical Risk. Anesthesiology, 17: 578, (July-Aug.), 1956.
- WAREMBOURG, H.; DESRUELLES, J.; MERLEN, J. F.; and LENTREIBECQ, P.: (Ultra-low Frequency Ballistocardiography) Lille Med., 8: 276–281, 1963. (French)
- WARREN, J. V.; ELKIN, D. C.; and NICKERSON, J. L.: The Blood Volume in Patients with Arteriovenous Fistulas. J. Clin. Invest., 30: 220, 1951.
- WEGRIA, R.; NICKERSON; J. L.; CASE, R. B.; and HOLLAND, J. F.: Effect of Nitroglycerine on the Cardiovascular System of Normal Persons. Am. J. Med., 10:414, 1951.
- WEISSBACH, G.: Analyse Ausserer und Innerer Vorgange bei der Ballistocardiographie. Ein Beitrag zur Ballistocardiographischen Schlagvolumen Bestimmung, Thesis, Karl Marx Univ., Leipzig, 1958. (German) (Monograph)
- Weissbach, G. H.: (Registration Technical Features of Direct Ballistocardiography.) Z. Kreislaufforsch. 49: 626, 1960. (German)
- WEISSBACH, G. H.: (The Role of Table Size and the Value of Additional Damping in Elongation Ballistocardiography.) Pfluger's Arch. Ges. Physiol. 270: 529, 1960. (German)
- Wendhut, G.: Zur Methodik der Direkten Ballistokardiographic; Untersuchungen über Dauermagnet und Schwingungsabnehmer (Method for Direct Ballistocardiography; Studies on Permanent Magnet and Deoscillator) Z. Kreislaufforsch., 47: 229, Mar. 1958.

- WENDHUT, G.; and REICHEL, H.: (Possibility to Produce Direct Ballistocardiograms for the Use in Progress Control.) Z. Kreislaufforsch., 46: 399, 1957. (German)
- WEST, J. W.; and CORBASCIO, A. N.: Effects of Intracornary Injections of Drugs on the UL-F Ballistocardiogram of the Dog. Federation Proc. 18:169, 1959. (Abstract)
- West, J. W.; and Corbascio, A. N.: An Experimental Study of the Atrial Ballistocardiogram with Special Reference to the Genesis of the H Wave. Personal Communication. (To be published.)
- WEST, J. W.; KOBAYASHI, T.; and GUZMAN, S. V.: Coronary Artery Catheterization in the Intact Dog. Circulation Res. 6:383, 1958.
- Wiggers, C. J.: Physiology in Health & Disease. Philadelphia, Lea & Febiger, 1949. 5th Ed.
- WILKINS, R. W.: A Tilting Ballistocardiograph. Am. Heart J., 26:351, 1943.
- WILLIAMS, E. B.: Ballistocardiography. Present Status in Medical Practice. Rocky Mt. Med. J., 51:710, 1954. Condensed in Current Med. Digest, Nov. 1954.
- WILSON, G. P.; CUNNINGHAM, D. M.; and GRISWOLD, H. E.: Experimental Response of the Human Body to a Known Periodic Force as a Measure of Ballistocardiographic Fidelity. Circulation, 15:280, 1957.
- WINER, N. J.: The Ballistocardiogram in Functional Heart Disease. The Am. J. of Cardiol., 4:379, 1959.
- WINER, N. J.; and ZARRIELLO, J. J.: Ballistocardiography in Theory and Practice. N.Y. State J. Med., 53: 2839, 1953.
- WINSOR, T. and Scott, C. C.: Further Observations of Cardiovascular Effects of Pentaerythritol Tetranitrate in Animals and Man. Am. Heart. J., 49:414, March 1955.
- WITTERN, W. W. von: Ballistocardiography with elimination of the influence of the Vibration Properties of the Body. Am. Heart J. 46:705, 1953.
- WITTERN, W. W. von: Force Ballistocardiography. 1952. Wright Air Development Center, Wright-Patterson Air Force Base, Ohio. (RDO No. 695-63; NADC-TR-52-340)

- WITTERN, W. W. von: The Torsion Ballistocardiograph. Mem. Rep. Aero. Med. Lab., 1-36. MCREXD-696-116A, June 29, 1948.
- WLASNE, B.: Balistokardiografia i Jej Znaczenie Kliniczne. Polskie Arch. Med. Wewnetraznej (Warsaw), 1:39, 1954.

# Υ

- Yoshizaki, Tohoru: (Ballistocardiograms from Normal Persons Taken with a Portable Ballistocardiograph.) Jour. Juzen Med. Soc., 59:41, 1957. (Japanese)
- Yuceoglu, Y. Z.; Pordy, L.; Chesky, K.; and Donoso, E.: The Ballistocardiogram in Coarctation of the Aorta. Am. Heart J., 53: 447, March 1957.
- Yuceoglu, Y. Z.; Richman, B.; and Kisch, B.: The Influence of Respiration on the Ballistocardiogram in Animal Experiments. Exp. Med. Surg., 13:243, 1955.

# Z

- ZAITS, F.; SMETANKA, E.; and ZATOPEK, A.: (Problem of Ballistocardiograph.) Csk. Fysiol. (Prague), 2:209, 1953. (Cz)
- Zajic, F.: (Current Status of Ballistocardiography.) Lek. Ved. Zahr. (Prague), 6:128, 1961. (Cz)
- ZAJIC, F.; SMETANKA, E.; and ZATOPEK, A.: (Problem of Ballistocardiography.) Cesk. Fyziol. 2: 209, 1953.
- ZAKRZHEVSKII, E. B.; and BAEVSKII, R. M.: (The Clinical Significance of Ballistocardiography.) Voennomed. Zh. (Moscow), 5:11, 1960. (Russian)
- Zaslavskala, R. M.: (Ballistocardiographic Changes in Chronic Non-Specific Pulmonary Diseases and in Cardiopulmonary Insufficiency.) Terapetv. Arkh., (Moscow), 31:34, 1958. (Russian)
- ZHUKOVSKI, M. A.: (Ballistocardiographic Method of Hemodynamic Studies in Rheumatism in Children.) Pediatriia, (Moscow), 7:40, 1959. (Russian)
- ZINELLI, M. T.; and ARENA, C.: (Ballistocardiography in Children.) Acta Paediat. Lat., 6:137, 1953. (Italian)
- ZOLOTNITSKII, IAL.: On the Relation of the Systolic Index of the Electrocardiogram to Ballistocardiographic Data Characteristic of Contractile Functions of the Myocardium. Terapatv. Arkh. (Moscow), 34:44, 1962. (Russian)